THOMAS McKELVEY CLEAVER

Author of
THE FROZEN CHOSEN *and* PACIFIC THUNDER

HOLDING THE LINE

THE NAVAL AIR CAMPAIGN IN KOREA

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FOREWORD

It is now almost seven decades since North Korean troops attacked South Korea in the summer of 1950. Since that time, numerous changes have taken place both in Asia and in the global strategic environment. The Cold War, the defining construct for American foreign policy from 1948 through 1989, is over: today's young Americans have no personal memory of it, no recollection of the constant threat of global superpower nuclear exchanges; no recollection of "duck and cover" drills; no recollection of weekly siren and emergency radio tests; no recollection of a Europe divided into free and captive camps, and a Berlin split by a grim gray wall with watchtowers and border guards all too ready to shoot those trying to flee the *faux* "workers' paradise" that was East Germany; and no recollection of proxy wars around the globe driven by the clash of Communist and non-Communist ideologies. Communism itself has largely died, with even those countries still paying homage to it led more by centralized self-serving dictatorial bureaucrats seeking their market share of the world's wealth than Marxist true believers concerned over the fuzzily defined and ever-shifting proletariat. Indeed, arguably there are more sincerely committed ideologues extolling Marx, Engels, Lenin, etc. wandering about on American and European university campuses than in the "real world" *realpolitik* of Cuba, North Korea, Vietnam, the People's Republic of China, etc.

It is well that Thomas Cleaver, a noted military and aviation historian, has turned his formidable skills to examining one of the most important of these wars, that fought in Korea from the mid-summer of 1950 to the mid-summer of 1953. Known for decades as "The Forgotten War," sandwiched between the Second World War that preceded it and the Vietnam War—more properly the Southeast Asian War—that followed, Korea has now achieved a degree of historical appreciation that it lacked for decades, thanks to a variety of historians, and the Federally sponsored Korean War commemoration of 2000–03 that focused much-needed attention upon it.

Still, the war itself is not as well appreciated as it should be, particularly regarding how air power functioned. Altogether, over the length of the Korean War, UN coalition airmen flew approximately 1.17 million sorties, of which 1 million were flown by American airmen. Of these, nearly 668,000 were combat sorties, over 392,000 flown by the US Air Force, and nearly 276,000 flown by the Navy and Marine Corps. Navy and Marine aviators flew 41 percent of all combat sorties, including nearly 127,000 of all interdiction sorties, almost 66,000 of all close air support sorties, nearly 45,000 of all counter-air sorties, nearly 27,000 of all reconnaissance sorties, and nearly 12,000 of all maritime patrol and antisubmarine warfare missions. It is a record that, given the state of naval aviation technology and the capabilities of aircraft carriers of the time, still impresses those who study it.

But mere numbers do not convey the heroism, dedication, resolve, and tenacity of those who flew and fought over Korea's blue-grey hills and rocky coasts. After the war, former UN commander General Matthew Ridgeway stated "Not only did air power save us from disaster, but without it the mission of the United Nations forces could not have been accomplished." Indeed: but it came at the price of hundreds of airmen killed, wounded, captured, and brutalized. But because of them, and all those who fought on land, sea, and in the air, South Korea was saved, and afforded the chance to become what it is today: an immensely successful nation with a highly educated and influential populace. Today, from orbit, one looks down at night on a dark world, with the world's successful nations clearly illuminated and outlined by lights, a measure of their prosperity and development. In contrast to these, North Korea is black, undeveloped, desolate, so much so that, looking from space, it seems that South Korea is a large island off by itself, separated from the Asian mainland. The naval and Marine airmen who flew and fought and too frequently died to preserve South Korea made that picture possible: a golden legacy for those who wore golden wings.

Dr. Richard P. Hallion
Shalimar, FL
September 2018

INTRODUCTION

The Korean War is largely forgotten today. Indeed, it has been known for at least the past 60 years as "The Forgotten War." Critics have called it "the first war America didn't win," and conservatives have pointed to it as having been lost due to political interference that prevented the military from taking the necessary steps to assure victory. Douglas MacArthur, who lost his command over this argument with the civilian authorities, lamented that "there is no substitute for victory," and the refrain has been heard ever since as the General Douglas MacArthur Foundation has dedicated itself to proving that the great man was right about everything.

At the time of the war itself, the civilian and military leadership of the United States were surprised that the war had broken out in such a surprising place at such a surprising time. The Truman administration, seeking political efficiency in a moment of conflict with the other party in Congress, failed to take up the Republican offer in the days immediately after the war's outbreak to pass a formal declaration of war, opting instead to claim they were merely carrying out the directives of the United Nations Security Council. When pressed by reporters to define exactly what was happening on the Korean peninsula, President Truman agreed that it could be described as a "police action," and there it remained for the next three years. Politically, this would change the way the United States has fought its wars ever since.

The United States was caught unawares by the war, at a time when the country's military forces had been cut to the bone in the mistaken belief that any future war could be avoided by waving the "big stick" of the atomic bomb at any possible enemy. The United States Navy, which had won the greatest naval war in history a mere five years before, was a shadow of that victorious force, under assault by the newly independent Air Force as being irrelevant to future warfare, while that service attempted to subsume all aviation activities under its own control. At the same time, the Army made the argument that the Marine Corps, "the navy's army," should more properly be under its control. As the political fight was being made in the halls of Washington, the United States lost its atomic monopoly when the Soviet Union exploded an atomic bomb in September 1949. This fact would overshadow all others in the coming war.

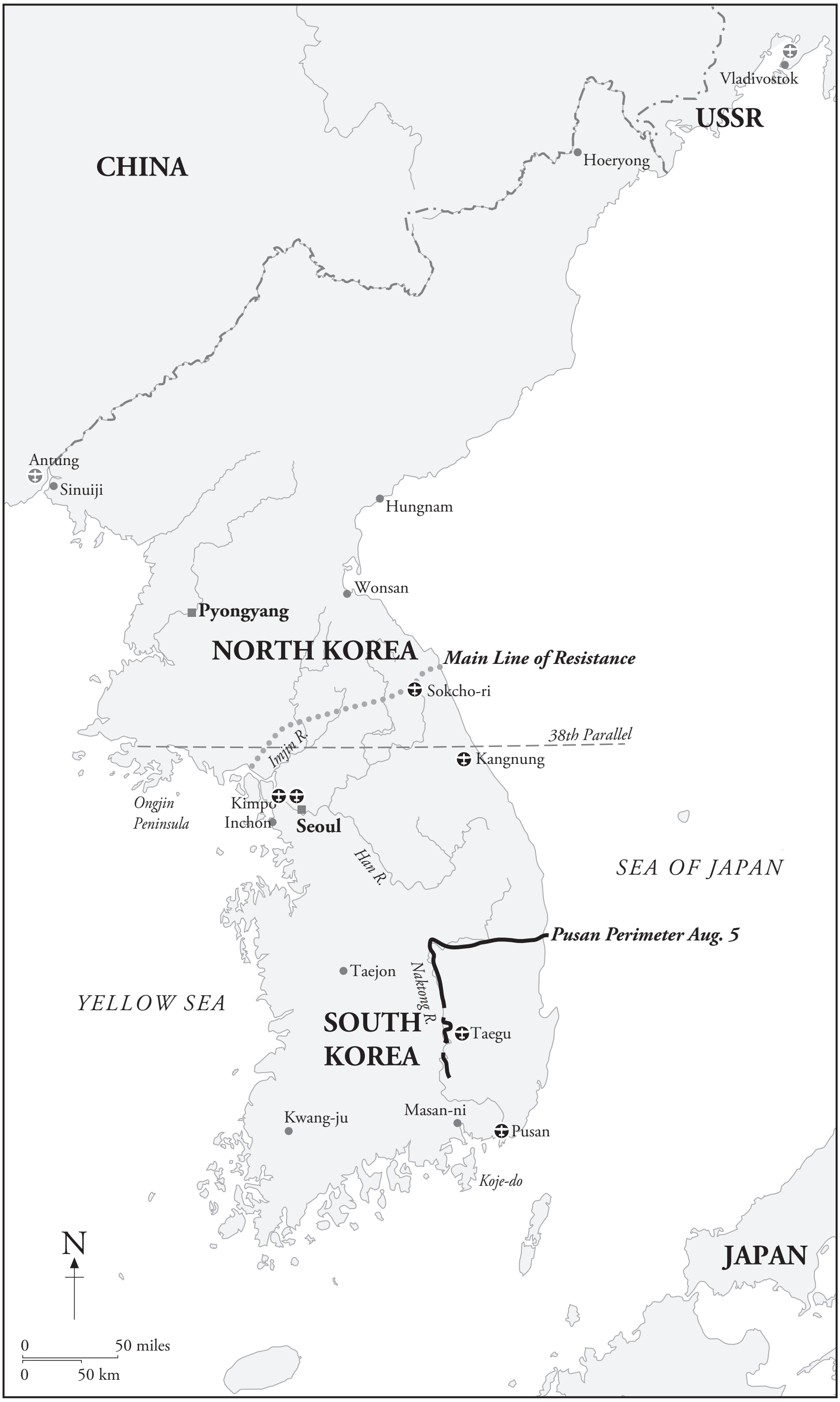
Within two weeks of the outbreak of war, naval aviation had demonstrated its ability to affect the outcome of battle in a way no land-based air force was capable of, when the Pyongyang strikes on the Fourth of July weekend convinced Stalin to step back from providing formal Soviet military support to the North Korean invaders, assistance that would have virtually guaranteed a North Korean victory by the end of the summer. Eight years to the day after their invasion of Guadalcanal that signaled the rollback of Japanese conquest in the Pacific, the Marines entered the battle in South Korea and provided the military margin that prevented a North Korean victory during the desperate battles of the Pusan Perimeter. Since August 1950, no one has argued against the usefulness of either aircraft carriers or the Marines.

Naval aviation, in the form of Navy squadrons aboard the fleet carriers of Task Force 77 and Marine squadrons aboard escort carriers and also shore-based, provided the decisive edge that prevented complete American disaster in the aftermath of the entry of Chinese "volunteers" into the war in November 1950. It put a protective umbrella over the 1st Marine Division during the epic withdrawal from the Chosin Reservoir in November and December 1950, while the US Army experienced what was called at the time "the greatest defeat of American arms since the Second Battle of Bull Run," in the words of Secretary of State Dean Acheson. The carriers were crucial to maintaining UN air superiority in the face of Chinese manpower superiority. USS *Leyte* (CV-32) operated off Korea in the Sea of Japan for a record 93 continuous days from October 15, 1950 to January 23, 1951, providing support to the Marines in their epic retreat out of North Korea, and in attacking the advancing Chinese forces that pushed the UN forces nearly back to the Pusan Perimeter before the advance was contained in mid-January 1951.

In the desperate fighting during the first half of 1951, as United Nations forces struggled to contain the enemy and establish a defensive line on the 38th Parallel that divided North and South Korea, naval aviation again played a crucial role, with such epic events as the dam-busting mission against the Hwachon Reservoir by Skyraiders of VA-176 that saw the last operational use of aerial torpedoes by the Navy. Marine aviators provided the closest of close air support to their brothers on the ground, breaking up Chinese massed attacks that would have otherwise been overwhelming.

By the end of June 1951, the communists realized they would not be successful in their campaign to force a military solution on the peninsula, and the war turned into two years of peace talks that commenced that summer. The negotiations would test the patience of Americans for the next two years, as the war turned into a stalemate along the 38th parallel.

The two years between July 1951 and July 1953 were described as a "long hard slog" for naval aviators, as Task Force 77's carriers and their escorting warships faced Siberian blizzards and winter seas that coated decks with ice, typhoons, and summer monsoons as they fought to hold the line in the Sea of Japan off northeastern North Korea or the Yellow Sea to the west of the Korean peninsula in a hard-fought attempt to slow, if not cut off, communist forces from their Manchurian supply bases. North Korea was not an advanced nation. There were no "decisive targets," the destruction of which would bring the enemy to the negotiating table to surrender. Bridges, roads and supply dumps were attacked again and again, as the enemy mounted ever more dangerous defenses. Night operations from the carriers became crucially important in destroying an enemy that only operated in darkness. And each attempt to escalate the damage in the hopes that such would bring the enemy around at the Panmunjom negotiations carried with it the possibility that it would instead bring about the wider war between the United States and the Soviet Union that all were committed to preventing. Frustration ruled all sides during those 24 months. Commander Marshall U. Beebe of Air Group 5, wrote of the war that "one of my toughest jobs was the constant battle to keep pilots' morale up … the war in Korea demanded more competence, courage, and skill from the naval aviator than did World War II. The flying hours were longer, the days on the firing line more, the antiaircraft hazards greater, the weather worse."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All of this was accomplished with a force that was in the midst of technological change. Naval aviation had undergone revolutionary change in the years since World War II, as jet-powered aircraft found their way aboard the carriers. Not until after the war ended would this change find a completely successful fit, since the carriers themselves were not equipped to adequately operate these aircraft safely. Lessons learned during the Korean War would lead to the carrier force that forms the heart of American sea power today.

In the end, Korea finished as a stalemate that has endured for the last 65 years, with the threat of renewed war ebbing and flowing over the decades. Korea seared the consciousness of a generation of American mid-level officers who would rise to command positions when the next Asian war broke out a decade later in Vietnam. The frustrations faced and lessons learned in Korea would be faced again in a limited war that the nation's political leadership feared would spread to a larger conflict. The same frustrations regarding the use of naval air power can be seen today when a president orders a carrier strike force again to the waters off North Korea.

To my mind, both as an aviation historian and enthusiast, and as a screenwriter, *The Bridges At Toko-Ri* stands out as the best flying movie ever made about naval aviation and one of the very best war movies. It is based on the excellent novel by James Michener, who wrote it after spending several months at sea with Task Force 77 in 1951–52. Several years ago, I had the opportunity in my role as aviation historian to interview Thomas J. Hudner, Jr., the only carrier-based naval aviator awarded the Medal of Honor in the Korean War. When I asked what it was like flying off the carriers then, he replied, "Did you ever see *The Bridges At Toko-Ri*? It was exactly like that." When I first saw it as a child, I was shocked because it was the first movie I'd seen in which the heroes died in the end. Later, after I had had my own experience of war, I came to appreciate that it was one of the few war movies that accurately portrays the true nature of heroism in combat: the "hero" is a man who doesn't want to be there and is afraid of the job he has been called on to do, yet does it anyway even in the most difficult circumstances. If the air war in Korea interests you and you have not seen this movie, I urge you to do so.

While virtually no American today knows of the way in which the United States fought the Korean War, during which nearly every building and all the infrastructure in the country was bombed into oblivion and then the rubble was bombed again, these facts are known to every North Korean citizen through the stories of their own surviving relatives, and has thus shaped the troubled political relationship, or lack thereof, between Washington and Pyongyang since the 1953 armistice, with the scars of the past resonating powerfully throughout North Korean society.

This American failure to understand the past has had a major negative effect on American attempts to negotiate with North Korea over that country's nuclear program. President Trump's complete failure to bring any understanding of this history to his dealings with North Korean leader Kim Jong-un threatens to ignite a new war in the region with terrible costs.

Americans are unaware that during the three years of the Korean War, the US dropped 635,000 tons of explosives on North Korea, including 32,557 tons of napalm, an incendiary liquid that can clear forested areas and cause devastating burns to human skin. In comparison, the US dropped 503,000 tons of bombs on all targets in the entire Pacific Theater during the three-and-a-half years of World War II. The former commander of the Strategic Air Command, General Curtis LeMay, stated in a 1984 interview that US bombs "killed off 20 percent of the population" and "targeted everything that moved in North Korea." While few Americans are aware of this truth, it has never been forgotten in North Korea.

In the first three months of the war, the US Air Force dropped more bombs on North Korea than were dropped on Japan during the ten months of the B-29 campaign in 1944 and 1945. Former Secretary of State Dean Rusk, who supported a wider war in Korea, said the United States bombed "everything that moved in North Korea, every brick standing on top of another." During the war, the only part of the Korean air war that became generally known to the American public was the highly publicized aerial "jousts" between American fighter pilots and their communist opponents in "MiG Alley," reported as an "ace race." Little mention was made about the carrier strikes or the B-29 carpet-bombing raids that flattened the cities of North Korea and destroyed what industry existed.

Given the possibility of a mistake founded in ignorance reigniting an old war with even more destructive weapons and destruction of place and people, a re-examination of the events of the Korean War is necessary. It is my hope this work contributes to that.

I also want to recognize my friends, former VC-3 pilot Rear Admiral Don Shelton, one of the "founders" of night and all-weather naval aviation, and MiG-killer Captain E. Royce Williams, Jr., the only pilot to shoot down four MiG-15s in one fight, for their support of this work and for sharing their experiences of the war. Also Colonel Ross Mickey for his memories, only months before his death at 100 years of age, of how the F9F Panther was created and of combat at night over North Korea in the F3D Skynight he also had a hand in developing. My friend Ed Jennings, who served in VA-176 during their epic deployment aboard USS *Princeton* in 1950–51 and was the last Naval Aviator to drop an aerial torpedo in combat, took the time to describe in detail the attack on the Hwachon Dam. Corky Meyer's stories of his flying adventures over the years I was fortunate to be his friend also provided perspective to how naval aviation changed at this important time. These are voices that have not been heard before in other histories of this war.

Thomas McKelvey Cleaver
Los Angeles, 2018

CHAPTER 1

CLIMB ANGELS TWO-FIVE – BUSTER!

The cloud cover was 500 feet above the freezing Sea of Japan on November 18, 1952. Visibility was estimated at two miles in blowing snow as a Siberian blizzard howled over the pitching, rolling ships of Task Force 77. The weather in the Sea of Japan had been marginal throughout the month of November, with flight operations canceled on six of the previous 18 days. The fleet was far north of its usual operating position in the Sea of Japan off the east coast of Korea above the Main Line of Resistance, where the carrier air groups had responsibility for the interdiction of enemy movements and resupply over northeastern North Korean supply lines and storage areas, destruction of enemy troops, and air support of naval gunfire.

Seventh Fleet commander Vice Admiral J. J. "Jocko" Clark, one of the most aggressive senior admirals in the Navy, had pushed for the opportunity to attack the North Korean port of Hoeryong at the mouth of the Tumen River since taking command of the naval forces the previous May. With the exception of a limited strike in September, the admiral had run into opposition from his superiors with every request for further action, due to the fact that Vladivostok, the main Soviet naval base in the Pacific, was only some 15 miles distant. Ever since the summer of 1951, the main goal of United Nations and American strategy in the war was to keep it confined to Korea and end the war on the conditions that had existed prior to the outbreak of war on June 25, 1950, when North Korean forces invaded South Korea.

The possible chance of an international incident between US and Soviet military units was high. Protracted failure in the peace negotiations at Panmunjom had finally led to approval by top commander General Mark Clark of a strike against Hoeryong, in hopes that this operation might be the one to provide the "tipping point" that would bring Chinese and North Korean representatives back to the negotiating table and bring an end to the war.

Task Force 77's three aircraft carriers, USS *Oriskany* (CVA-34), *Kearsarge* (CVA-33) and *Bonhomme Richard* (CVA-31), commanded by Carrier Division One's Rear Admiral H. E. Regan as Commander Task Force 77, and their escorting ships were some 83 miles south of Vladivostok, 45 miles east of the North Korean port of Chongjin, where they had taken position the day before. Seventh Fleet commander Clark was present aboard the battleship USS *Missouri* (BB-63). Maximum-effort strikes had been flown on November 17 against Chongjin and the supply center at Kilchu, with strikes flown against Hoeryong the morning of November 18. The Hoeryong mission was difficult, since the aircraft could only approach their targets in the port by circling around the city to the south and then to the west, to attack on an easterly heading, staying just south of the river, so they would exit their bomb runs heading away from Vladivostok in an effort to ensure they stayed out of "neutral" Soviet airspace. As they made their attacks, the pilots could see the silver MiG-15 fighters on the runway of the Vladivostok air base, and several reported seeing Soviet jets airborne over Soviet territory.

The pilots of the task force were unaware that the heavy cruiser USS *Helena* (CA-75) was host to a special team of Russian linguists of the new and then-unknown National Security Agency. Their task was to monitor Soviet radio broadcasts, to provide warning of any Soviet response to the American air strikes. At 1340 hours, the linguists in *Helena*'s radio room intercepted conversations between Soviet ground controllers and a group of Soviet Navy MiG-15s that had just taken off. A minute later, *Helena*'s radar picked up seven "bogies" climbing through 12,000 feet on a southerly heading. Word was passed to the carriers. Radio warnings went out to the pilots of the Combat Air Patrol (CAP) in their F9F Panthers patrolling above the clouds over the fleet.

Oriskany's Air Group 102, which a year before had been the second reserve air group to see action in Korea and was now a "regular" fleet air group, drew the assignment of launching a supplemental CAP, since their jet fighter squadron, VF-781 "Pacemakers," was the first Navy fighter squadron in Korea equipped with the new F9F-5 Panther. Combat by pilots of F9F-2 Panthers against MiG-15s flown by Russian "volunteers" on this same date two years before had revealed that the Navy jet was outperformed in all ways by the Soviet fighter; only the superior training of the Navy pilots had given them any chance against their opponents. While the F9F-5 utilized the Pratt & Whitney J-48, an engine based on the British Tay, which was a more powerful version of the Nene that powered the F9F-2 in its "Americanized" version as the J-42, this increase in power did not bring the "first generation" Panther into a competitive position vis-a-vis the "second generation" MiG-15. Still, every little bit might help in investigating what the Soviets were up to.

Lieutenant Claire Elwood was assigned as division leader with Lt (jg) John Middleton as wingman. Lieutenant E. Royce Williams, Jr., was assigned as section leader with Lt (jg) Dave Rowlands as his wingman. Williams remembered that:

> None of us had ever flown together before. When the captain of the *Oriskany* decided to launch an extra Combat Air Patrol, our squadron commander gave it to the four of us because for various reasons we hadn't been able to fly a lot recently. I hadn't flown a mission in ten days after catching a cold until I went on the first strike against Hoeryong that morning.

At 1350 hours, the flight deck crews began maneuvering the four Panthers across the icy deck into position for launch. Elwood and Middleton were positioned first, with their airplanes attached to the hydraulic catapults that would fling them into the air with just enough speed to stay airborne. In response to directions from the launch officer, the two pilots advanced their throttles to full power and stood on their brakes. The launch officer watched the pitching deck and gave the launch signal as the bow reached maximum down angle and began to rise. The two dark blue jets were catapulted in quick succession, going into the air at the maximum up angle and still dipping low over the gray seas as they tucked in their gear and started to climb. Back on deck, Williams and Rowlands moved into position and soon followed Elwood and Middleton into the dark, stormy sky.

The four jets were quickly swallowed in the clouds as the pilots contended with snow flurries and did their best to maintain close enough formation to keep visual separation on each other without colliding. The Fighter Direction Officer's (FDO) voice crackled in their headphones: "Climb Angels Two-Five. Buster!" Noses high, the Panthers climbed under maximum power at 5,000 feet per minute. The FDO passed the information that the bogies were now 83 miles north, inbound.

After several minutes in the clouds, the sky brightened above. Suddenly, the Panthers popped out of the clouds into a clear deep blue sky at 12,000 feet. They continued their climb. As they passed through 16,000 feet, Williams spotted seven contrails far above, at 40,000 feet or more, and called the bogies. A moment later, his sharp eyes caught the sun flash on the shiny swept-wing MiG-15s flying abreast each other, each wearing the red star of the Soviet Union on their flank as contrails spread behind them. "I flipped on my gunsight and fired a burst to test my guns," he recalled. At that moment, division leader Elwood reported his fuel pump warning light had come on. The FDO directed him to break off and report overhead *Oriskany*. Elwood passed lead to Williams as he and his wingman Middleton turned away and dived toward the clouds.

"We were just going through 26,000 feet when the Russians split up and dove out of the contrail layer," Williams remembered. "The first ones came at us from the right side in a four-plane formation and opened fire. I pulled into a hard climbing left turn and came around on the Number Four MiG. I fired a burst and hit him solidly in the rear fuselage. He went down smoking, and my wingman then followed him, leaving me alone." Williams, now alone, faced six Soviet fighters.

The three remaining MiGs of the first group easily accelerated away from the Panther and climbed to position themselves for another firing run. Williams saw their left wings come up as they reversed course. "They had me cold on maneuverability and acceleration – the MiG was vastly superior on those counts to the F9F. The only thing I could do was out-turn them." He managed to cut loose a burst of fire as the MiGs flashed past, but failed to score any hits.

As the first three pulled away again, the other three joined in. Williams sweated as he reversed, jinked and rolled to get away from each firing run. He glanced over his shoulder and saw a MiG locked on his six o'clock. Pulling the stick back into his gut, he threw it against his right leg as he stomped right rudder and executed a very hard wings-vertical right turn with contrails spinning off his wingtip fuel tanks. The MiG flashed past his tail.

In the rush of adrenaline, the fight seemed like it had been going on for an hour. The enemy formations became ragged and Williams got several opportunities to track an individual MiG as the pilot bored in to attack. Some rounds seemed to hit, but he couldn't follow up as he stomped rudder and slammed ailerons to keep his six o'clock clear. "I was firing at every MiG that passed within gun range as they came by."

Turn. Turn again. Not a second spent straight and level. Fire a quick burst to throw off their aim. Turn some more. Then again.

> Finally, the leader and his wingman went off to the right and I went after the section leader of the plane I'd shot down. He pulled up into the sun and I lost him, then I saw the leader and his wingman come around for a diving attack. I turned into them and fired at the leader. He turned away and the wingman rolled down on me and we went past belly-to-belly as I raked him with a long burst. He caught fire and went down. The section leader then came around and I turned into him and fired at him practically point-blank and he went down. The leader then came around again and I fired and parts came off him as he dove away.

The fight wasn't over.

> As I maneuvered to avoid the wreckage, I porpoised to try and clear my tail. I was tracking another wounded MIG when I suddenly spotted one of the other two as he slid in on my six. He fired a burst with his 37mm cannon and hit me in the wing. The shell went into the engine area and messed up the hydraulic unit in the accessory section. I suddenly lost rudder and flaps and only had partial aileron control. The only thing that really worked were the elevators. I dove toward the cloud deck below at 13,000 feet, and he was 500 feet behind me and still shooting all the way down. It seemed like it was taking forever to drop that 10,000 feet! My wingman finally got back

> in the fight and came in on the MiG and he pulled away as I went into the clouds.

Williams fought to control the Panther, hoping he could pull out of the dive. "I came out of the clouds at around 400 feet. I was way too low to eject – you had to be above 1,200 feet and in a climb to successfully eject from a Panther – so I was stuck with staying in the airplane, like it or not. I soon discovered it was uncontrollable below 170 knots, so I had to maintain high speed regardless."

As he passed over the fleet a few hundred feet above the freezing ocean, several escorting destroyers opened fire as he flashed past. "Fortunately, I was low enough and fast enough they didn't have a chance to really aim, so nobody hit me."

Aboard *Oriskany*, the deck was ordered cleared for what was obviously going to be a crash landing. "I told them I couldn't fly slower than 170 knots and I could see the ship visibly speed up as she turned into the wind." Williams set himself up on final approach; the carrier was taking spray over the bow as the stern rose and fell through a 20-foot arc. "I didn't want to ditch, because I wasn't sure I could make a successful ditching, and that water was cold enough I knew I wouldn't last ten minutes even in my poopy suit."

The F9F's normal landing speed was 105 knots. Williams kept the bucking Panther under control and made a straight-in approach at 170 knots. "The *Oriskany*'s captain headed the ship just away from the wind, which gave me the opportunity to come aboard." Williams slid his canopy open and flew a "Roger pass" with the Landing Signal Officer (LSO) holding his paddles straight out to either side. The flight deck bottomed out and started back up just as the LSO gave the cut. "I caught the three wire and shut her down."

After taking a moment to catch his breath, Williams climbed out of the riddled jet and was surprised he'd made it back when he saw the damage.

> They counted 263 holes in the airplane, mostly from 23mm hits and some 37mm hits, including the one in the wing that went into the engine accessory section. If it had been six inches forward, it would have hit the spar and blown my wing off. Eight inches to the rear and it would have blown up the engine. I had fired off all 760 rounds of

> 20mm I had aboard. I wouldn't have had a chance if I hadn't been armed with those cannons.

After the airedales pulled everything of value from F9F-5 BuNo 125459, the broken carcass was heaved overboard, where it disappeared into the dark sea.

In the fight of his life, Royce Williams had accomplished what no other American fighter pilot would ever accomplish: shoot down four MiG-15s in one fight. Given that the F9F-5 Panther was outclassed and outperformed on all points – speed, maneuverability and firepower – by the MiG-15, which was nearly 100mph faster and had a superior thrust-to-weight ratio, it was truly a performance for the record books.

After spending November 19 replenishing dry stores and provisions from USS *Graffias* (AF-29), aviation and electronic stores from USS *Chourre* (ARV-1), ammunition from USS *Paricutin* (AE-18), and fuel oil and aviation gasoline from USS *Cimarron* (AO-22), *Oriskany* departed her station and arrived in Yokosuka the following week. There, Williams received orders to report to Vice Admiral Robert P. Briscoe, Commander Naval Forces Far East. Admiral Briscoe informed Williams about the National Security Agency team aboard *Helena*. There was no way Williams' fight could be publicized, since there was too much chance the Soviets would discover how they had been spotted.

There was real fear at the highest levels of the US government and UN command that such an "incident" could change the Korean "police action" into World War III. Never mind that Air Force pilots 100 miles to the west were fighting Russian "volunteers" flying MiG-15s with North Korean markings in "MiG Alley," Williams' nose-to-nose fight had directly pitted the two great Cold War adversaries against each other. As far as the United States Navy was concerned, the fight had never happened.

After ordering Williams to tell no one, Admiral Briscoe informed him the NSA team had proof from recorded radio transmissions that he had gotten at least three of the MiGs, while the fourth had crashed in Siberia. Unfortunately, the gun camera footage had been "edited" aboard *Oriskany*, leaving only a portion showing two MiGs hit solidly.

Naval commanders ordered a version of the mission created that became the official account as found in the *Oriskany* and Air Group 102 Action Reports, though it had little connection with the facts: Williams was credited with one kill and a probable/damaged while Lt (jg) John Middleton, wingman to division leader Elwood, who had never been anywhere near the fight, was credited with a kill on the basis that, at the end of the 35-minute fight, he had been vectored toward a descending MIG whose pilot had ejected when Middleton approached it and fired a burst from out of range. Both pilots were awarded the Silver Star for their "accomplishments." Dave Rowlands, who never fired a shot in the entire fight, was awarded a probable and the Distinguished Flying Cross. The history books have told the story that way ever since.

The next month, President-elect Dwight D. Eisenhower made good on his campaign promise, "I will go to Korea," and arrived in Seoul on December 4, in company with Pacific Fleet commander Admiral Arthur Radford. At the suggestion of Admiral Briscoe, Seventh Fleet commander Admiral Clark took the three pilots with him to meet Eisenhower at the headquarters of Eighth Army commander General James Van Fleet, in Seoul. Clark later wrote in his memoirs that when they arrived at Van Fleet's headquarters, the general – a teetotaller – suggested, "I don't think we ought to expose these young men to all this drinking. Why don't you put them in this little anteroom, and I'll get Ike to talk to them out there." Clark agreed, but the minute Eisenhower came into the room he told Van Fleet, "Bring these boys in here and let's give them a drink."

Williams remembered that the President-elect was a Scotch drinker, who tried several times to convince the young lieutenant to try some of his private selection. "But being a convinced Bourbon man, I stuck to my guns." The three gave Eisenhower their pre-rehearsed story of the "incident," which met with approval. Clark was very satisfied when "... at the height of this interview, in walked the two ranking Air Force generals in Korea, O. P. Weyland and Glenn Barcus." The three fliers were privately congratulated by Admiral Radford.

Williams remained silent about the event for nearly 50 years, while he flew with Air Force Korean aces at the Fighter Weapons School at Nellis and rose to command Navy fighter squadrons through the Cold War and three carrier air groups during the war in Vietnam before finally retiring in 1984 to become a champion bonsai gardener in Southern California.

Following the end of the Cold War in 1992, the Russians opened their records and revealed that Williams had indeed gotten four: Captain Belyakov, Captain Vandalov, Lt Pakhomkin and Lt Tarshinov of the VVS-PVO, the Air Defense Forces of the Red Air Force. Vandalov, Pakhomkin and Tarshinov were directly shot down in the fight, while flight leader Belyakov was badly shot up and was killed when he attempted to crashland as soon as he was over Soviet territory.

On November 18, 1952, Royce Williams became the top-scoring carrier-based naval aviator and the top-scoring naval aviator in a Navy jet of the "forgotten war." Despite several modern attempts to set the record straight, the US Navy History and Heritage Command has refused to do so, on the grounds that there is no longer an American witness alive to verify Williams' account, this despite the Russian publication of the names of the Soviet pilots who died in the fight.

CHAPTER 2

THE REVOLT OF THE ADMIRALS

On September 2, 1945, the day Japan formally surrendered, the United States Navy was the strongest naval force in history: 151 aircraft carriers had been constructed since 1940, including 122 escort carriers (CVE) and nine light carriers (CVL), while 24 *Essex*-class carriers – the most numerous single class of major capital ships ever constructed – had been ordered, of which 20 were in commission at the end of the war, with four still under construction. The air wings aboard these ships when operating as the Fast Carrier Task Force had fielded up to 1,500 aircraft for operations since the invasion of the Marianas little more than a year previously.

While the United States was the strongest military power in the world in 1945, most Americans had not changed their opinions of the country's place in world affairs that they had held before Pearl Harbor. While many US political and military leaders saw the United States as the proper inheritor of the global role held by Great Britain after the Napoleonic Wars, this was not a political position that could be sustained in the immediate postwar period.

So eager were Americans to return to their peacetime activities, the military leadership was forced by popular dissent within the armed forces themselves to vastly speed up plans for demobilization. Around the world in the fall of 1945, over 1,000,000 Americans were in uniform. While there existed a policy of demobilization based on a "points system" that recognized those who had been in the combat zones the longest as having priority for return to civilian life, a large number of these soldiers, sailors and marines had entered service in the final year of the war; the points system would see them in uniform as late as 1947. In the months following the Japanese surrender, the new Truman administration considered sending combat troops to China to back up the government of Chiang Kai-shek in the resurgent civil war with the communists that had only been put on hold during the war with Japan.

That fall, a "G. I. Movement" began among American troops in Japan and the Philippines, led initially by union members associated with the Trotskyist Socialist Worker's Party: their demand was "Bring Us Home!" The movement spread rapidly among many who were far less politically motivated than the original organizers. The overwhelming majority of Americans who had volunteered for the military or been drafted saw their services as "for the duration." With war's end, few saw any further need for remaining where they were. The movement spread to families, who wanted their loved ones back home.

Congress decided to speed the return of the troops. Support by the Republican Party for bringing the troops home was a major contributor to the party's electoral success in November 1946, which saw the GOP take control of the House of Representatives for the first time in 14 years. President Truman got the message and all wartime servicemen had been demobilized by the month following the election. The defense budget declined even faster, from $90 billion on July 1,1945 to $14 billion by July 1, 1946. In the months immediately following the end of the war, millions of dollars' worth of equipment throughout the former battle zones was bulldozed into pits and covered over, or pushed off piers into the water, as no funds were appropriated to pay for storage. New military equipment en route to the Pacific Theater was scrapped or tossed overboard.

The military budget would face further reduction in following years. These reductions were also spurred by an economic recession in 1945 that caused GDP to fall a whopping 10.6 percent, as wartime production fell and was not rapidly replaced by civilian production, while another recession in 1949 saw GDP fall 0.5 percent while unemployment reached as high as 7.9 percent.

This postwar retreat to traditional American isolationism was strengthened by the belief that the United States could control world events to prevent further conflict because it was the sole possessor of the atomic bomb, which was seen as a viable deterrent since the country had already demonstrated its willingness to use the weapon against Japan. During his radio address on August 9, 1945, in which he announced that an atomic bomb had been dropped on the city of Nagasaki, President Truman stated what would become the postwar policy regarding the atomic bomb, that since it "is too dangerous to be loose in a lawless world, Great Britain and the United States, who have the secret of its production, do not intend to reveal the secret until means have been found to control the bomb so as to protect ourselves and the rest of the world from the danger of total destruction."

The truth was that once the existence of the bomb had been demonstrated in its use, there was no "secret." Every physicist knew what to do to create an A-bomb. The only question was whether a government possessed the necessary national will to marshal resources to create one. The only possible opponent of the United States in 1945 capable of that action was the Soviet Union, the possessor of the world's largest army. In 1944, with the NKVD having performed the necessary industrial espionage to discover the American plans for construction of a bomb, Soviet leader Josef Stalin had already directed his scientists to commence a top-priority program to develop the USSR's own atomic bomb. This effort would achieve success in August 1949, effectively ending the American "atomic monopoly" and turning the nascent Cold War into a threat to the survival of the planet.

Nevertheless, the United States believed in 1945 that threatening the use of the atomic bomb would be sufficient to allow the nation to act as the "world policeman" with a minimum investment and effort. Initially, there appeared to be grounds for optimism that an agreement for the international regulation of atomic weapons could be negotiated. The foreign ministers of the United States, Great Britain, and the Soviet Union met in Moscow in December 1945, where they jointly proposed that an atomic energy commission be created that would be responsible to the United Nations Security Council, where each of the Big Three possessed a veto that would stop any action by the council that they opposed. The guidelines agreed to for the proposed commission also included the international inspections President Truman demanded as a precondition to establishing such an organization.

The UN General Assembly voted unanimously on January 24, 1946 to create the UN Atomic Energy Commission (UNAEC), along the lines envisioned by the Moscow Agreements. The UNAEC met in June 1946 to create the international organizational machinery necessary for controlling atomic weapons. However, American delegate Bernard Baruch presented a plan for an autonomous International Atomic Development Authority which would be independent of the Security Council and would possess the power to punish, by atomic attack if necessary, any nation found to have violated its pledge not to construct nuclear weapons. Baruch's explanation of the American rejection of the Security Council as the ultimate punitive agency of the United Nations was that "there must be no veto to protect those who violate their solemn agreements not to develop or use atomic energy for destructive purposes." With that, the Moscow Agreements were effectively scuttled.

By this point, the Soviet Union had also changed its position on the international regulation of nuclear weapons from what it had agreed to six months earlier. On June 29, 1946, five days after Baruch presented the American position, Soviet UN Ambassador Andrei Gromyko proposed a multilateral treaty that would require the signatories to destroy "all stocks of atomic weapons whether in a finished or unfinished condition" within three months. The Soviet proposal contained no provision for inspections to ensure compliance. Inspections were a red line for President Truman, since he had already stated that he refused to "throw away our gun until we are sure the rest of the world can't arm against us."

Truman wasn't the first senior American leader to think of the atomic bomb with the metaphor of a gun. Secretary of State James F. Byrnes was thinking similarly when he said to Soviet Foreign Minister Vyacheslav M. Molotov, "If you don't cut all this stalling and let us get down to work, I am going to pull an atomic bomb out of my hip pocket and let you have it," in the midst of a reception during a meeting of American, British and Soviet foreign ministers in London back in September 1945. Byrnes' crude attempt at "atomic diplomacy" only strengthened Stalin's determination to end the American monopoly when his fellow Old Bolshevik reported the comment to him. Molotov, who had met and faced down every major political figure in Europe in the previous ten years, as well as having demonstrated an ability to survive his megalomaniacal master, responded to Byrnes that the American "could not use the threat of the bomb to gain political concessions from the Soviet Union."

The phrase "iron curtain" as a description of Soviet policy in eastern Europe entered the English language on March 5, 1946, when former Prime Minister Winston Churchill, who was then leader of the opposition in Parliament, gave a speech at Westminster College in Fulton, Missouri, titled, "The Sinews of Peace." President Truman was present on the platform and listened as Churchill began with praise for the United States, declaring it stood "at the pinnacle of world power." Churchill's primary purpose in giving the speech was to argue for strengthening the "special relationship" between the United States and Great Britain, which he termed "the great powers of the English-speaking world." He described Soviet behavior following the end of the war, and ended by declaring, "From Stettin in the Baltic to Trieste in the Adriatic, an iron curtain has descended across the continent."

While Truman and others in the government liked Churchill's turn of phrase regarding an "iron curtain," which dovetailed with their own growing view of the Soviet Union as an enemy, they were not so enamored of the call for strengthening the "special relationship." Nuclear diplomacy by the United States during this period now involved conflict with Great Britain in a manner even more direct than that between the US and USSR. Churchill and President Franklin D. Roosevelt had negotiated an agreement in 1942, following a decision by the Belgian government-in-exile to grant access to the uranium ore reserves in the Belgian Congo, to apportion access to these reserves between the US and UK on an equal basis for use in developing atomic weapons. In addition, at the 1943 Quebec Conference the two countries had agreed that neither would use an atomic weapon in war without the consent of the other.

By mid-1947 the US government perceived the agreement as detrimental to the United States, following Truman's decision to ramp up production of atomic bombs. The Americans decided that they could not allow a British veto of the use of atomic weapons if the country was to maintain full independent control over its foreign and military policies. This attitude of separation had begun in 1946 when Labour Prime Minister Clement Attlee had allowed transfer to the Soviets of the latest Rolls-Royce Nene jet engine under the terms of a UK-USSR trade agreement. Despite the fact that Foreign Secretary Ernest Bevin was perhaps a more passionate anticommunist than many Americans from his experience in the trade union movement, the UK was seen as a waning power that could not be fully depended upon in the coming struggle with international communism.

In July 1947, the United States announced that it needed more than the half of the Congo's uranium the Churchill-Roosevelt agreement allowed, and that it wished to end the Quebec agreement regarding British consent to American use of the bomb. After prolonged and occasionally bitter negotiations regarding these changes in policy, Britain finally agreed to the American demands in December 1947 in return for an American promise to provide technical assistance in a British search for peaceful uses of atomic energy.

By the summer of 1947, all the ingredients for starting the Cold War were in place, following a series of crises that swept the non-communist world. The US and USSR had already locked horns at the UN over the recognition of Soviet-controlled governments in Poland, Hungary, Romania and Bulgaria. There were tense negotiations in progress to obtain Soviet withdrawal from its wartime occupation of northern Iran. The Greek civil war was heating up after Great Britain stated it was unable to maintain armed forces in that country to keep the warring parties apart. The Soviets were pressuring Turkey for naval access to the Mediterranean in the Dardanelles.

President Truman, who had thought of Premier Stalin as someone he might be able to negotiate with before meeting the Soviet leader at Potsdam in July 1945, was increasingly strong in his opinion that Stalin was untrustworthy and determined to dominate Europe. His response to developments in Greece and Turkey was to offer military aid, which became the first formal step toward the policy of containment that would be the American strategy throughout the Cold War. His conviction was strengthened by the Communist *coup d'état* that overthrew the democratically elected government of Czechoslovakia in 1948, and the victory in the Chinese civil war of Communist forces led by Mao Zedong over the nationalist government of Chiang Kai-shek in October 1949.

For the Army Air Forces, the end of the war saw the world's largest air force close to achieving the goal held by its leadership since the establishment of the US Army Air Service in 1918: recognition as a separate armed service, equal to the Army and Navy. The other services had derided the USAAF during the war for assigning a public relations officer to every unit, but the result spoke for itself: the

American public believed the air force had been the decisive service during the war, ending with the dropping of two atomic bombs that led to Japanese surrender. The last point has been an article of faith in the United States since 1945, despite evidence from the Japanese themselves that their surrender was more dictated by the entry of the USSR into the Pacific War the same day Nagasaki was bombed, and the desire of the Japanese government not to see the country divided between Western and Soviet occupation zones as had already happened with Germany.

The Air Force achieved its goal on October 14, 1947 with congressional passage of the National Security Act of 1947, which took the Air Force out of the Army and established it as a separate, equal service.

With the atomic bomb seen as the weapon that could keep the peace, the leaders of the air force pinned their hopes for first-among-equals political superiority on the B-36 intercontinental bomber, which they saw as the coming "big stick" of American atomic diplomacy. Development of the bomber began in 1941, when air force planners faced a very real possibility that Great Britain might fall to the Germans, depriving the United States of any European base of operations in what was seen as an inevitable conflict with Germany. Thus, a bomber capable of transatlantic bombing missions would be necessary.

The USAAF's initial Request For Proposals (RFP) was promulgated on April 11, 1941. The specification required a 450mph top speed with 275mph cruising speed, 45,000ft service ceiling, and finally a maximum range of 12,000 miles at 25,000ft. It was quickly determined these requirements were too demanding for any short-term design capable of entering service in the needed time frame. On August 19, 1941, the requirements were revised to a maximum range of 10,000m and a 4,000m effective combat radius, a 10,000lb bomb load, cruising speed of 240–300mph, and a 40,000ft service ceiling. The Consolidated Aircraft Corporation and the Boeing Aircraft Company responded to the RFP, with Consolidated's response winning the competition on October 16, 1941 while Boeing was directed to put priority on its previously ordered B-29 very long range bomber. Consolidated proposed to deliver the first prototype of what was originally designated the B-35 in 30 months. Once accepted, the designation was changed to

B-36 to avoid confusion with the Northrop YB-35 flying wing bomber, ordered at the same time.

The possibility that Britain would be lost as a European base ended with US entry into the war. Consolidated was ordered to slow development of the B-36 and increase B-24 Liberator production. The first B-36 mockup was inspected on July 20, 1942; a month later the project was moved from Consolidated's factory in San Diego, California, to a new government-built factory in Fort Worth, Texas, with several months' consequent delay.

Air force planners originally intended to base the B-29 Superfortress in China for missions against Japan. However, continuing Japanese military superiority in China threatened the future development of such bases. The planners then considered Hawaii might be the only secure US base in the Pacific large enough to base a substantial bombing force, and that any strikes against Japan would thus require a bomber capable of undertaking trans-Pacific missions from that mid-Pacific bastion. On July 23,1943, the B-36 received higher development priority when the USAAF submitted a "letter of intent" to Convair (the company's name after a merger with Vultee Aircraft Corporation the month before) for an initial production run of 100 B-36s "off the drawing board," with initial delivery due in August 1945.

On August 20, 1945, five days after the Japanese surrender, the prototype B-36 rolled out of the Convair factory in Fort Worth, Texas. With a wingspan of 230 feet and a length of 162 feet, it was a third again as large as the B-29. Powered by six Pratt & Whitney R-4360 28-cylinder piston engines, it was the largest piston-engine bomber to ever take flight. Capable of flying 10,000 miles unrefueled and carrying the "Fat Man" plutonium atomic bomb without modification to the airframe, the B-36 seemed to be the answer to their prayers for the disciples of Douhet.

The leadership of the Army Air Forces began their campaign for independence immediately following the end of the war. Writing of the campaign years later, Admiral J. J. "Jocko" Clark claimed that the head of Navy Public Affairs, Commander Charles G. "Henry" Moore, was the first to propose service unification as a response to the USAAF campaign. Moore's suggestion of a unified Defense Department resulted in a "service reform" movement in 1946 to establish three military departments – Army, Navy and Air Force – in a unified Department of Defense.

Congressional leaders were attracted to the idea as a way of getting "more bang for the buck," since there would be savings in eliminating "duplication," the ever-feared bureaucratic budgetary bugaboo. With the more extreme supporters of the idea soon calling for all aviation components of the other services to be placed in the newly independent air force, while the Marines would be absorbed into the Army, the Navy soon came to oppose unification other than an Army and Navy department, each with their own aviation components, in a Defense Department.

These proposals to "unify" aviation roused immediate opposition within the naval aviation community, which well understood that the absorption of the Royal Naval Air Service into the Royal Air Force in 1918 had been directly responsible for the failure of the Royal Navy to field a really successful indigenous naval air arm during World War II. At its core, the Navy's reluctance to embrace unification came from Admiral King's fear that unification would lead to a reduction of American "sea power" by those unfamiliar with its potential. Given statements by the other two services that the only foreseeable war would take place in Europe and would require only a seagoing force that could transport troops to the battlefield and maintain supplies, King's fear was not unreasonable.

Chief of Naval Operations Admiral Nimitz became so opposed to the idea of services unification that he nearly parted ways with President Truman over the issue. In the summer of 1947, Truman ordered the Joint Chiefs to resolve the problems of unification. New York financier Ferdinand E. Eberstadt, who was a friend of Secretary of the Navy James Forrestal, suggested what became known as the Eberstadt Plan. In this proposal, the services would be separated into Army, Navy and Air Force, under a Secretary of Defense. The Navy would retain naval aviation but give up any idea of participating in "strategic" aviation, and the Marine Corps would remain a part of the Navy.

As an additional inducement to the Navy, Forrestal was proposed as the first Defense Secretary. Admirals Nimitz and Forrest P. Sherman accepted the idea of a separate air force as proposed by the plan. Opposition came from Admiral Arthur D. Radford, Deputy CNO for Air and his followers, who included Admiral J. J. Clark. The opponents were faced with a *fait accompli* when they were informed by their congressional ally, Chairman of the House Committee on Expenditures Clair E. Hoffman of Michigan, that "when the recognized heads of the Army, Navy, and Army Air Force come here to testify that this is what they want, we in Congress have to go along with them."

With the assistance of pro-Navy congressman W. Sterling Cole of New York, the naval aviators, which included admirals Radford, John Towers and Clark, drafted a statement to include in the unification bill: "The Navy shall have naval aviation and naval air transport necessary to naval operations." Cole was successful in having the wording included in the final bill verbatim. The Unification Act was passed in January 1947 and took effect on September 8. The Army Air Forces became the United States Air Force on October 14. While the long-held Army belief in the efficiency of a single central command, and the long-held desire of the Army Air Force for status equal to the Army and Navy, were achieved, the act also saw the establishment of the Central Intelligence Agency (CIA), which came about due to the belief that the failure of intelligence and coordination at Pearl Harbor required a central administration and coordination of intelligence.

The first operational B-36B entered Air Force squadron service in May 1948. A month later, the Air Force discovered that the most important airplane in its inventory was not the intimidating, enormous B-36, but rather the prosaic C-54 cargo transport, which over the next year would acquire the name "Candy Bomber."

On June 24, 1948 the US-USSR conflict reached its first important crisis when the Soviets instituted a blockade of access by the Western Allies to railway, road, and canal routes to the sectors of Berlin under control by the West. The reason for the blockade soon became apparent when the offer was made to stop the blockade if the Allies would withdraw the newly introduced Deutsche Mark (DM) from circulation in West Berlin, which was seen by the Soviets as a Western attempt to economically subvert the Soviet occupation zone.

The crisis was immediate: West Berlin had food supplies for 36 days and the coal supply would run out in 45 days.

For the newly independent United States Air Force the Berlin Blockade was an event that was completely unlike any contemplated by air force leadership. Because of the postwar shrinkage, organizing the air operation would take primacy over every other activity in the service. Over the course of the next year, the USAF, the RAF, RCAF (Royal Canadian Air Force), RAAF (Royal Australian Air Force) and RNZAF (Royal New Zealand Air Force), along with the French Armée de l'Air, would organize what became known as the Berlin Airlift, which by April 1949 was able to provide more supplies that month than had been provided by ground transport the year before, at the cost of operationally sapping each of the participating air forces.

While the Berlin Blockade was under way, President Truman achieved an unexpected victory in the presidential election that November. Now validated as leader of the American people through election and no longer "the accidental president," he was determined to place his own stamp on the presidency and the country. While he had been a strong supporter of President Roosevelt and the New Deal, Truman was no Keynesian. With the economy now converted to civilian production, Detroit was turning out cars once again and the construction industry nationwide was gearing up for the production of housing to meet the demands of an American public that had never before had access to individual family housing as they now did through the agency of the G.I. Bill.

Truman believed that the duty of the government was to step aside and reduce its demand for resources. His first move was to reduce defense expenditures, which were already billions of dollars below what had been requested by the service chiefs. With the atomic bomb for security and an air force that could deliver such a weapon anywhere in the world with the B-36, Truman believed the Army and the Navy could be safely reduced further than had already happened. The Air Force, seeing its opportunity for bureaucratic primacy, again argued that a separate air force inside the Navy was redundant organizationally and operationally irrelevant, since that air force could not deliver the atomic bomb that was now the centerpiece of the new American military force. Despite the wording in the Unification Act protecting naval aviation, the Navy's leaders soon became aware that the civilian leadership might make that moot through the appropriations process.

At the same time, General Hoyt S. Vandenberg, the first Air Force Chief of Staff, announced his opposition to building any more aircraft carriers, stating that a future war with the Soviet Union "would be fought with nuclear weapons carried by strategic bombers deep inside the Eurasian land mass." No less than General Dwight D. Eisenhower, the country's most prominent general from his leadership of the war in Europe, voiced his desire to see the Marine Corps unified with the Army. The unification battle was on again, if it had ever really stopped.

While the Air Force was busy getting the B-36 operational, the Navy took the opportunity to remind the country that it still existed and could provide worthwhile service. Between 1946 and 1947, the vast fleet had shrunk to a shadow of its former self. By 1948, only eight of the last nine *Essex*-class carriers were still in commission, along with the three larger *Midway*-class "CVB" or "battle" carriers. Two *Commencement Bay* class CVEs still operated in the Pacific Fleet for training Marine air groups.

The publicity campaign had begun on October 9, 1947, when USS *Valley Forge* (CV-45) departed San Diego as flagship of Task Force 38 to conduct three months of fleet exercises in Hawaii. "Happy Valley," as she was known to her crew throughout her career, then visited Australia in February 1948, where the task force exercised with the Royal Australian Navy. The fleet visited Hong Kong in February before proceeding across the Indian Ocean and through the Suez Canal for exercises with the Greek and Italian navies in the Mediterranean, finishing with exercises in Norway before crossing the Atlantic in May and arriving in New York on May 22 for a five-day fleet visit, followed by a transit of the Panama Canal and return to her home port in San Diego on June 11, 1948.

Three months later, USS *Tarawa* (CV-40) departed San Diego on September 28, 1948. The carrier visited Pearl Harbor; Tsingtao in China; Hong Kong; Singapore; Ceylon; and Bahrain by the end of the year. Transiting the Suez Canal in January 1949, she stopped in Greece, Turkey and Crete before crossing the Atlantic to arrive in Norfolk, Virginia on February 21, 1949.

However, whatever good publicity these voyages represented was short-lived. On June 30, 1949, following Truman administration budget reductions for the Navy, *Tarawa* joined two of the other active *Essex* carriers that were decommissioned and sent to what was called "mothballs," the reserve fleet. By the time she entered the mothball fleet, it appeared there would be no more carrier deployments to "show the flag." The Navy dug in to defend its existence.

Service unification and its promise of economies in operation was just what President Truman wanted. Following his unexpected electoral victory, he wanted to invest his political capital in domestic development. Reduction of the defense budget was an excellent place to start. Truman met resistance in his budgeting decision from James V. Forrestal, the former Secretary of the Navy who became Secretary of Defense in 1947, charged with coordination of the three services that had been designated the National Military Establishment. Forrestal had been shocked and appalled after taking office as Secretary of Defense to learn that the president's method of determining the defense budget was not based on potential military threats, but rather on a determination of what funds were available, after subtracting from total receipts what was needed for domestic programs and other responsibilities and recurrent operating costs, with the remainder after these deductions becoming the defense budget.

Forrestal was personally convinced of the value of naval aviation from his experience as civilian head of the Navy during the final climactic battles of the Pacific War. More importantly, he supported the Navy position on the value of carrier aviation in the face of Air Force demands that the number of operational aircraft carriers be reduced to make funds available for the B-36 and had agreed construction of the USS *United States* (CVA-58), lead ship of a class of five "super carriers" approved on July 29, 1948 in the Naval Appropriations Act of 1949. These ships would be capable of operating bombers that could carry atomic bombs and were seen as the Navy's answer to the B-36. The keel of the *United States* was scheduled to be laid down on April 18, 1949 at Newport News Drydock and Shipbuilding. Politically, Forrestal was also an American leader who came early to see the Soviet Union as a threat. As a man who prized anonymity and had once said in an interview that "obscurity" was his hobby, Forrestal found it difficult to deal with the vicious personal attacks made by Washington pundits Drew Pearson and Walter Winchell after his anti-Soviet views became known. Unfortunately, Forrestal was a sick man. His responsibilities as Secretary of Defense resulted in mental and physical strain that began to show in his daily actions toward the end of 1948. John L. Sullivan, then Secretary of the Navy, remarked years later that "In the previous June he was not in good shape, but he made a comeback, and in September 1948 was more like his old self. Very early in October he began issuing me contradictory orders, and from then on he went downhill very fast."

Forrestal's condition was obvious to President Truman. Naval presidential aide Rear Admiral Robert L. Dennison remembered a conversation in which the president asked if he knew who the Secretary of Defense was, to which Dennison said, "Yes, sir, Jim Forrestal." Truman responded: "You're wrong, I'm the Secretary of Defense … Jim calls me up several times a day asking me to make a decision on matters that are completely within his competence, but he passes them on to me." On January 28, 1949, Truman called Forrestal to the White House for an off-the-record meeting in which he informed the Defense Secretary that Louis A. Johnson would replace him on May 1, 1949. He had personally turned against the secretary shortly before the election, when Drew Pearson revealed that Forrestal had met with New York Governor Thomas E. Dewey, who was at the time widely expected to win the presidential election, and agreed to stay on as Secretary of Defense. Forrestal's condition continued to deteriorate and he resigned his post on March 28, 1949.

The day he resigned, Forrestal was reported to be "in a strange daze." A Navy plane was used to fly him to Under Secretary of State Robert A. Lovett's estate in Hobe Sound, Florida to join his wife, who was vacationing there. While there, he was diagnosed with "severe depression" of the type "seen in operational fatigue during the war" by Dr. William C. Menninger.

While such cases as Forrestal's had been successfully treated at the famous Menninger Clinic, the former Secretary of Defense was sent to the National Naval Medical Center (NNMC) in Bethesda, Maryland. With his location under governmental control, it would be difficult for the press to discover that he was undergoing treatment for mental illness. Following his arrival at the NNMC on April 2, he was placed in a room on the 16th floor to be certain of keeping reporters away; the official announcement of his condition stated he was being treated for "nervous and physical exhaustion." He appeared at first to respond positively to treatment.

Following seven weeks of treatment at NMMC, however, Forrestal's body was found early on the morning of May 22, 1949, on the third-floor roof below the open window of the 16th-floor kitchen located across the hall from his room; he was wearing only the bottom half of a pair of pajamas. The press and later biographers claimed that his alleged last written statement, part of a poem from W. M. Praed's translation of Sophocles' tragedy *Ajax*, was an implied suicide note:

> Fair Salamis, the billows' roar,
> Wander around thee yet,
> And sailors gaze upon thy shore
> Firm in the Ocean set.
> Thy son is in a foreign clime
> Where Ida feeds her countless flocks,
> Far from thy dear, remembered rocks,
> Worn by the waste of time –
> Comfortless, nameless, hopeless save
> In the dark prospect of the yawning grave …
> Woe to the mother in her close of day,
> Woe to her desolate heart and temples gray,
> When she shall hear
> Her loved one's story whispered in her ear!
> "Woe, woe!' will be the cry –
> No quiet murmur like the tremulous wail
> Of the lone bird, the querulous nightingale –

An official Navy review board was convened to examine the secretary's suicide and the hearings were completed on May 31. A brief summary of the board's findings was finally published on page 15 of the October 12 *New York Times*. The findings announced the death was the result of Forrestal's fall from the window, though there was no explanation of what event might have caused the fall, nor was there any mention that a bathrobe sash cord had reportedly been found tied around his neck.

Louis A. Johnson, who replaced Forrestal as Secretary of Defense, is the top contender for the title of "Worst Secretary of Defense in the History of the Office." Johnson was described by other Washington Democrats as "a wheeler-dealer, a self-made man with an inflated sense of his political abilities and possibilities." The events of 1949 due to his machinations following his accession to the office proved his unfitness. What came to be known as "The Revolt of the Admirals" was one of the great American political crises, one that would have profound consequences.

A lawyer from West Virginia active in that state's politics before the American entry into World War I, Johnson served as an Army captain in France in 1918. As a veteran, he rose to become the National Commander of the conservative American Legion from 1932 to 1933 before being appointed Assistant Secretary of War from 1937 to 1940 by President Roosevelt. He felt personally betrayed by Roosevelt when he was passed over to become Secretary of War in favor of Henry Stimson following Roosevelt's third-term victory. In 1949, President Truman felt great loyalty to Johnson due to the fact he was the only major figure in the Democratic Party who had supported what appeared to be the president's doomed campaign for re-election in 1948, for which Johnson had been the chief fund-raiser responsible for financing the famous "whistle stop" train tour in September, an event that was crucial to Truman's come-from-behind victory. He had campaigned after the election to be appointed Secretary of Defense.

Johnson's outlook on both the military establishment and world affairs was the polar opposite of Forrestal's. His policies as Secretary of Defense were enthusiastic support of President Truman's determination to increase funding for civilian programs by further economy of operations through more military unification, by eliminating "waste and duplication of effort." He was seen by the president as the ideal candidate to take political heat and continue the policy of reducing the defense budget in the face of continued resistance by the armed forces to such actions. Thus, the Department of Defense budget would be capped at the Fiscal Year (FY) 1947 level of $14.4 billion starting with FY 1948; it was followed by further reductions in FY 1949 and 1950, until the president's budget proposal in January 1950 for FY 1951 set it at $13.5 billion. Taking inflation into consideration, this would mark the lowest level of defense spending since 1940, at which time the US military ranked number 13 in the world.

Unfortunately for the Navy, Johnson arrived with a strong belief in the strategic airpower views of the Air Force, which dated from his close association with the prewar Army Air Corps that had begun during his time as Assistant Secretary of War. Johnson's mendacity was on display within a week of his arrival at the Pentagon. Within days, he ordered three *Essex*-class carriers mothballed by the end of the fiscal year, June 30, 1949. When challenged by Admiral Richard L. Conolly, he said:

> Admiral, the Navy is on its way out. There's no reason for having a Navy and a Marine Corps. General Bradley tells me amphibious operations are a thing of the past. We'll never have any more amphibious operations. That does away with the Marine Corps. And the Air Force can do anything the Navy can do, so that does away with the Navy.

Johnson's animosity to the Marines followed the views of President Truman, who had not-so-cordially disliked the Corps for years, dating back to his Army service in World War I where he felt the Marines had "grabbed the glory" in the Meuse-Argonne offensive in which he had fought. The president was quoted as late as August 1950, when the Provisional Marine Brigade was arriving in Korea to save the day for UN forces in the Pusan Perimeter, that "the Marine Corps is the Navy's police force and as long as I am President, that is what it will remain. They have a propaganda machine that is almost equal to Stalin's."

While the Navy was on the receiving end of the brunt of Johnson's reductions, the secretary would not limit his budget-cutting campaign to the Navy and Marines. He ordered the Army to scrap or sell to other countries almost the entire inventory of surplus World War II tanks, radios, trucks and small arms, rather than shipping them to storage for reconditioning and maintenance. He then resisted Army budget requests for reserve stockpiles of small arms and antitank weapons, all of which would become desperately necessary 18 months later.

While the Air Force faced far fewer program cancellations and cuts than the other two services, Secretary Johnson refused requests by Air Force leaders to double the number of active air wings and reduced the budget for tactical air force readiness in favor of the strategic nuclear force he saw as the answer to all problems.

Notwithstanding that USS *United States* had been authorized by Congress the previous June and funded in the Fiscal Year 1949 Defense appropriation, Johnson wrote to General of the Army Dwight D. Eisenhower, the temporary presiding officer of the Joint Chiefs of Staff, requesting the Chiefs' judgment on the proposed new aircraft carrier "tentatively designated USS *United States*" on April 15, 1949, less than three weeks after taking office. The following week, Johnson informed the Joint Chiefs that they were to provide their views on the carrier by close of business on Friday, April 23, since he wanted to make a final decision on Saturday morning.

The services prepared separate papers on the issue and delivered them to the JCS late Friday; the package was delivered to the secretary the next morning at 1030 hours. The press release given to reporters from the secretary's office announcing cancellation of the *United States* was received by Chief of Naval Operations Admiral Louis E. Denfeld at 1055 hours. The decision was in complete contravention of the assurances Johnson had given only days earlier.

Navy Secretary John Sullivan had spent the weekend in Corpus Christi, Texas, where he gave a speech. He returned to Washington that Sunday, absolutely furious at Johnson, since he had been assured by the secretary that no decision would be taken without further consultation between him and the Secretary of Defense. On April 26, Sullivan submitted his letter of resignation, effective May 24, 1949. In a Pentagon ceremony for his departure, Sullivan told his supporters, "I have been privileged to serve with you men and women of the greatest Navy the world has ever known – a Navy that has never been defeated by a foreign foe." He was looking directly at Johnson, who hurriedly left.

In a gesture of solidarity, Under Secretary of the Navy W. John Kenney also resigned, leaving the civilian leadership of the Navy to the political whims of Johnson. Sullivan was replaced by Francis P. Matthews, an attorney and businessman from Omaha, Nebraska, who had never before served in government or the military, whose appointment quickly proved to be a near-disaster for the Navy as a service and specifically for naval aviation.

The battle now escalated.

Not only was the Navy's civilian leadership vulnerable, but the professional leadership was in turmoil at the same time. Admiral Nimitz had retired from his position as chief of naval operations in December 1947. Defense Secretary Forrestal had proposed that he be replaced by a naval aviator. However, Truman and his advisor Admiral Leahy preferred Admiral Louis Denfeld, a fleet officer who at the time was Commander Pacific Fleet with experience running the Bureau of

Personnel and whose additional qualifications included knowledge of Washington politics combined with a reputation for an agreeable personality.

Denfeld privately wanted to appoint Admiral Radford as vice chief of naval operations, but kept that to himself since the choice was opposed by Nimitz and Sherman, and even Forrestal. Nevertheless, when he took the position on December 15, 1947, Denfeld announced Radford as Vice CNO, which was well received by the naval aviation community.

The Navy faced real difficulty during June and July 1949, as Secretary Johnson proposed substantial cuts to the FY 51 budget. Johnson sent a memorandum to the secretaries of the Army, Navy, and Air Force laying out force strengths and ceilings for the services in FY 51. The Navy would be allowed only four attack aircraft carriers, down from eight in the FY 50 budget. Senior naval aviators believed senior Navy surface officers and the Office of the Chief of Naval Operations would accept downgrading the carriers if such agreement would keep Johnson from further cuts.

While Johnson's economic decisions rocked naval aviation, several hundred million dollars previously authorized for other Air Force programs was reallocated to the B-36 program, allowing an increase in production orders for the bomber. The more committed naval aviators and their congressional supporters were convinced by these changes that they had to find a way to bring the issue to the public attention of Congress.

Cedric R. Worth, special assistant to new Under Secretary of the Navy Dan A. Kimball, and Commander Thomas D. Davies, special assistant to the Assistant Secretary of the Navy for Air, assumed leading positions in the opposition. Captain Frank A. Manson later recalled that:

> Tom Davies used to come over to my office, and I … [can] see him now, standing with his … foot on the window [sill] there and his … hand on his chin … talk[ing] about this situation, you know. And he was [wondering] "How can we get a congressional hearing?"

The two collected material on the B-36 program, creating what would later be known as "The Anonymous Document." On April 13, they met with aviation pioneer Glenn L. Martin, chairman of the Glenn

Martin Aircraft Company, and Martin Company representative Harold G. Mosier. Worth told them there was a lot of material available on the B-36 that would "make a very interesting story" if put together. Martin replied he would like to read such a document.

Within a week, a nine-page initial draft of "The Anonymous Document" with 55 numbered sections detailing a combination of gossip from the aviation industry with wild suppositions regarding B-36 procurement was prepared. The document's main point was that the B-36 was a "billion-dollar blunder," which was only being procured due to the personal financial interests of Secretary Johnson and Air Force Secretary W. Stuart Symington in its production and because of favors they owed to Convair CEO Floyd Odlum, husband of famed aviatrix Jacqueline Cochran.

Glenn Martin received a copy, while others were leaked to longtime Navy supporter and member of the Armed Services Committee Representative James E. Van Zandt (R-PA) and other Congressmen. Eventually Speaker of the House Sam Rayburn (D-TX) and Chairman of the House Armed Services Committee Carl Vinson (D-GA) were provided with copies.

Several weeks had passed with no public mention of the Anonymous Document's allegations. Finally, Van Zandt introduced a resolution to establish a select committee to investigate aircraft contract awards and cancellations since May 8, 1949 on May 15. The next day, the congressman gave a "fire-breathing speech" on the House floor in support of the resolution, recounting the most damning rumors regarding Convair's contracts and outlining the alleged roles of Johnson and Symington. The B-36 controversy was now a part of the public record.

The press attention Van Zandt's speech received alarmed Georgia Congressman Carl Vinson, who was one of the most powerful members of the House of Representatives. Ever since he had received a copy of the Anonymous Document, Vinson had tried to suppress and ignore the rumors. In an attempt to maintain control of the situation, he submitted a resolution requesting his Armed Services Committee be authorized to conduct "thorough studies and investigations relating to matters involving the B-36 bomber." On June 8 an amended resolution was agreed to and an eight-item agenda for the B-36 investigation was adopted by the committee the next day. Importantly, an examination of "the role and missions of the Air Force and Navy" to determine the validity of the decision to cancel the *United States* was one of those eight items.

Between August 9 and 15, 1949, Vinson's Armed Services Committee conducted the hearings in which the Air Force witnesses were able to thoroughly destroy the charges made in the Anonymous Document. On the last day of the hearings, Vinson declared there was "not one scintilla of evidence" supporting the corruption charges or of any role played by illegal influence in B-36 procurement. With that, the hearings were recessed until October 5, and over the next week rumors flew in Washington that the committee would hold no further hearings on the other agenda items, including the cancellation of *United States*.

Following the recess, legendary naval aviator Captain John G. Crommelin determined he would do whatever was necessary to force continuation of the hearings and make public the other issues. Crommelin, who was serving on the Joint Chiefs' staff, invited reporters to his home on September 10, where he castigated the Pentagon's "General Staff concept" for having created the controversy over the B-36 and causing cancellation of *United States*. Subsequent press reports brought widespread attention, which led to further public comments from other naval officers, including Fleet Admiral William F. "Bull" Halsey, the most famous naval commander of the Pacific War.

On September 14, the new Secretary of the Navy informed all major Navy commanders that anyone who wished to express their views to him should do so through "proper channels," terming the public statements "insubordination" by "anti-unification" naval aviators.

Vice Admiral Gerald F. Bogan, commander of the First Task Fleet and one of the main task group commanders in Task Force 58 during the war, responded in a classified memo that:

> The morale of the Navy is lower today than at any time since I entered the commissioned ranks in 1916 … In my opinion this descent, almost to despondency, stems from complete confusion as to the future role of the Navy and its advantages and disadvantages as a permanent career.

The Bogan memo received signed endorsements by Chief of Naval Operations Admiral Denfeld and Vice CNO Admiral Radford, in which both stated that substantial numbers of naval officers agreed with Crommelin's and Bogan's views.

Throughout the rest of September, staff members from the House Armed Services Committee tried to obtain agreement from senior naval officers and Secretary Matthews to end the hearings without presenting the Navy position. Matthews was amenable, but Admiral Radford met with Congressman Vinson and other senior Navy leaders on October 3, where Vinson was persuaded to hold off announcing further delay. The agreement fell apart within hours when Captain Crommelin secretly provided an Associated Press reporter with sanitized copies of the Bogan memo, with Radford's and Denfeld's endorsements. The resulting headlines forced Vinson to reopen the hearings; rumors were rampant about private detectives paid by Air Force officers following Navy officers around Washington.

Admiral Clark later wrote in his memoirs that "momentarily, Crommelin became something of a hero in Navy circles until the full import of what he had done came to light." Bogan became the object of wrath on the part of both Johnson and Matthews, and took an early retirement. Admiral Denfeld suspended Crommelin from duty while he attempted to patch up relations with the two civilian leaders. Unfortunately, this was impossible, as Matthews was now determined to appoint a CNO more amenable to the Johnson line, despite having assured Denfeld of his reappointment. Matthews offered the position to Admiral Richard L. Conolly on the condition that he tone down his expected testimony to the Vinson committee, which Conolly refused.

The hearings on unification and strategy opened on October 6, 1949, only a few weeks after public announcement of Soviet success in exploding an atomic bomb, which effectively ended the "atomic monopoly diplomacy" of the previous four years. Clarification of the current implications of such a military situation as it affected naval and amphibious capabilities was undermined by the general acceptance in the political and military establishment of the belief that the Soviet Union was the only possible enemy and Europe the only possible theater, with nuclear war the only outcome. With these points made in public by the nation's senior military commanders, it was no wonder that Soviet leader Josef Stalin would decide less than three months later that the United States would not consider an attempt to unify the Korean peninsula under communism an act worthy of going to war over.

Secretary Matthews was the first witness. He proclaimed Navy morale good and further stated that any naval aviators who felt differently were guilty of being “anti-unification.”

His testimony was not well received. The next witness was Admiral Radford; his presentation was well prepared, decrying the morality of an atomic attack against civilians while questioning how operationally effective the B-36 actually was.

Radford’s impressive testimony focused on the need for further development of tactical air power by both the Navy and Air Force, which was prevented by the drain of resources created by the B-36. Radford was followed by a “Who’s Who” of famous World War II carrier task group commanders, from whence came the name “Revolt of the Admirals” to describe the event in the press.

News that a B-36 sent to mile-high Stapleton airfield in Denver, Colorado for “hot and high” testing was unable to take off for a week due to an unseasonable 85-degree fall heat wave that put the airport’s density altitude beyond the bomber’s performance parameters did not serve the Air Force well and likely led directly to the decision to equip the B-36 with four auxiliary jet engines for additional takeoff power.

Admiral Denfeld appeared before the committee on October 13. The chief of naval operations had tried to avoid confronting Secretary Matthews over policy, but he shocked Matthews and Johnson when he supported Radford and the naval aviators with a bold statement at the outset that he “fully supported” the naval testimony that preceded his. Matthews, enraged, stormed from the hearing room. Denfeld then detailed his concerns about the effect of the current budget cuts on Navy strength, the Joint Chiefs’ role in agreeing to further B-36 procurement while advocating cancellation of the *United States*, and his belief that Congress and the administration should give predominant weight to service views in determining the level of forces needed. He concluded: “Fleets never in history met opposing fleets for any other purpose than to gain control of the sea – not as an end in itself, but that national power could be exerted against an enemy.” The press took the admiral’s strong testimony as a bombshell to the committee members and more so to the Secretary of Defense.

Marine Commandant Clifton Cates followed Denfeld and echoed his testimony, further infuriating the Johnson-Matthews forces. Joint Chiefs Chairman General of the Armies Omar Bradley proceeded to castigate the admirals as "fancy dans" and attacked the Marine Corps by repeating his declaration that there would never again be a need for amphibious operations. The committee adjourned on October 21.

Repercussions from the Navy testimony during the Unification and Strategy Hearings seemed minimal in the short term. Influential committee members had been convinced that naval aviation was not redundant.

Admiral Denfeld was soon replaced as CNO. Vinson himself publicly questioned Johnson and Matthews for their pettiness. For his part, Johnson had revised his original proposal shortly after the Unification and Strategy hearings were announced, increasing the number of attack carriers to six for the FY 51 budget. While it was an increase of two from the original proposal, it was still a reduction of five from the FY 49 budget.

Those who had opposed unification and Secretary Johnson found they had to leave Washington. Admiral Radford left his position as Vice CNO to take command of the Pacific Fleet. This was fortunate for the Navy in light of later events, since he remained in command in the Pacific until after the Korean War, during which he put his organizational and leadership talents to work in facing that crisis. Admiral J. J. Clark, who was refused promotion to Vice Admiral and the command of Atlantic fleet aviation for his role, went back to sea as a task force commander, hoisting his flag aboard the carrier *Philippine Sea* as Commander Carrier Division Four, a position he would hold until the fall of 1951. During this time he took his task group to the Mediterranean twice and engaged in fleet exercises off Greenland that provided much useful information regarding cold weather operations that Task Force 77 would put to use during three Korean winters.

Over the longer term, naval aviation had survived its greatest threat. The March 1, 1950 Armed Services Committee report was solidly pro-naval aviation, noting that US air power consisted of Air Force, Navy, and Marine aviation, of which strategic bombing was only one aspect. The report concluded that differences between the Air Force and Navy were due primarily to "fundamental professional disagreements on the art of warfare."

Admiral Forrest P. Sherman, who replaced Admiral Denfeld as CNO and was a naval aviator, was initially distrusted in the naval aviation community as a "loner," as well as one of those naval officers who had supported service unification. However, Sherman was a far more effective leader than Denfeld. Over the two years he served before dying in office of a heart attack in August 1951, he championed development of the North American AJ-1 "Savage" nuclear-capable heavy attack bomber. He retired Crommelin, but saved the careers of men like future CNO Captain Arleigh A. Burke, who had incurred the wrath of Johnson and Matthews during the "revolt." He reduced the mothballing of ships and was able to create plans for rapid recommissioning of those already mothballed, which would have great effect the next year following the outbreak of war in Korea. He won a $350 million increase in the Navy's budget for future development, which funded the development of the revolutionary USS *Nautilus* (SSN-571), the first nuclear-powered submarine. In April 1950, Sherman secured congressional approval for the development of a new supercarrier to replace *United States*, which would emerge in 1955 as USS *Forrestal* (CVA-59), first of the modern aircraft carriers.

Secretary Johnson was hoist on his own petard less than a year after the "revolt." He had long thought of himself as the man to succeed President Truman in the 1952 elections, and was seen by other high-ranking members of the administration as both dishonest and untrustworthy. Following the outbreak of the Korean War, he became an advocate for utilizing Chiang Kai-shek's nationalist Chinese troops in the war. In this, he was allied with Douglas MacArthur and opposed by Secretary of State Acheson and Chairman of the JCS General Omar Bradley on grounds it was certain to goad Mao Zedong to intervene. After he failed in early August 1950 to follow Truman's directive and order MacArthur not to release a proposed speech to the Veterans of Foreign Wars convention that specifically took issue with administration policy on Korea, his days in the Defense Department were numbered.

In late August, Special Ambassador and very influential Democratic leader Averill Harriman told the president how, on June 29, 1950, he had been in the room with Johnson when he took a call from Senator Taft following the senator's speech calling for the resignation of Acheson, in which Johnson had congratulated Taft for "saying the exact right thing." After hanging up, Johnson then crudely solicited

Harriman's support for his 1952 presidential candidacy, promising to make Harriman Secretary of State. This act of disloyalty changed Truman's mind about his 1948 supporter.

The president decided it was time for Johnson to go, political debt or no. He had been Truman's worst political appointment, and the president gained stature with the military leaders who had been united in their opposition to Johnson. General George C. Marshall was asked to return to government service as Defense Secretary and accepted. At the time Johnson left in early September, a joke was making its way around the Pentagon that the Joint Chiefs had informed the Defense Secretary he could finally call off his relentless troop reduction demands, since enough men were being killed in Korea every day to bring the Army's strength down to the desired level.

The day before he left office as Secretary of Defense, Johnson made reference to William Shakespeare's *Macbeth* in his final speech: "When the hurly burly's done and the battle is won, I trust the historian will find my record of performance creditable, my services honest and faithful commensurate with the trust that was placed in me and in the best interests of peace and our national defense." To date, no historian has come to that conclusion regarding Louis Johnson.

CHAPTER 3

FORGING A NEW SWORD

The US Navy came late to the aeronautical revolution founded on the jet engine. The delay was not from lack of desire, but due to the difficulties of mating jet power with the carrier flight deck.

The problem was inherent in the first jet engines. Where a piston engine responded quickly to throttle changes, the jet turbine responded slowly to the demand for increased or decreased power; too rapid throttle movement could result in a loss of all power through a flameout. New operating procedures had to be developed to bring a jet-powered airplane aboard an aircraft carrier. This would eventually mean the creation of new aircraft carriers that were very different from those that existed at the time jet propulsion first arrived.

The existing aircraft carriers could not operate jet aircraft that could not function within the performance parameters required. To meet the maximum-speed landing requirements and the minimum-speed takeoff requirements, the most modern aerodynamic development – the swept wing found on the Air Force F-86 and the Soviet MiG-15 second-generation jet fighters – could not be mated to the World War II *Essex*-class carriers without drastic equipment changes for the ships in the form of more powerful catapults and the angle deck that allowed for higher landing speeds than the straight deck. Thus, the Navy's leading fighter aircraft used during the Korean War would be at a performance disadvantage with their opponents.

The Navy had first committed to trying to use jet power in a carrier-based airplane when the Ryan FR-1 "Fireball" was ordered on February 11, 1943. It was the result of a proposal instigated by Admiral

John S. McCain, Sr., head of the Bureau of Aeronautics, for a fighter using both a piston and jet engine, since the sluggish acceleration characteristics of early jet engines were considered unsafe and therefore unsuitable for operation from a carrier. Powered by a Wright R-1820 of 1,350hp and a General Electric I-16 turbojet (later redesignated J-31) development of the British Whittle engine giving 1,600lb thrust mounted in the rear fuselage, the jet engine was seen as a supplementary power source that would be used primarily in combat. The first prototype flew on July 25, 1944, without the jet engine installed. The first flight with jet power occurred three weeks later.

With a top speed of 413mph on both engines, the FR-1 did not offer a performance increase over existing fighters like the F4U-4 Corsair, which had a top speed of 460mph at high altitude. However, the FR-1 was capable of this speed at low altitude, where it did outperform both the Corsair and the F6F-5 Hellcat. Such low-altitude speed was important in the face of the threat posed by kamikaze suicide attackers. The contract of December 2, 1943 for 100 FR-1s was increased to 700 by a supplemental contract on January 31, 1945, following successful carrier trials aboard USS *Charger* (CVE-30) in Chesapeake Bay that saw five successful launches with piston power and three with both powerplants operating.

In the event, the Pacific War ended before the FR-1 could see action, and total production saw only 66 delivered by November 1945, with orders for 1,044 FR-1s canceled on August 15, 1945. VF-66 took first delivery of an FR-1 in March 1945. The squadron operated from NAS Los Alamitos south of Los Angeles; pilots would amuse themselves when they spotted other Navy or Air Force fighters by turning off the piston engine and feathering the prop, flying past the surprised pilots apparently "without power" as they cruised on the jet engine.

Operation of the airplane from carriers was difficult. It was the first carrier aircraft with a tricycle landing gear, which took some adjusting to by both pilots and flight deck personnel. Early attempts to qualify aboard carriers saw two of three FR-1s damaged while attempting the land aboard USS *Ranger* (CV-4) on May 1, 1945, with one missing the arresting gear and crashing into the barrier while the nose wheel of the second collapsed on touchdown. The squadron was fully carrier-qualified by June and was in pre-embarkation status to deploy to the Western Pacific when the Japanese surrendered. VF-66 became VF-41 on October 18. On November 6 an FR-1 became the first aircraft to land on a carrier under jet power, though it was unintentional; following failure of the piston engine, the pilot managed to start the I-16 and land aboard USS *Wake Island* (CVE-65), though the airplane then crashed into the barrier. In 1946, VF-41 suffered three fatalities before redesignation as VF-1E on November 15, 1946. Operations continued in 1947 with carrier qualifications aboard USS *Badoeng Strait* (CVE-116), but by then the FR-1 had been proven too fragile for repeated carrier landings, with frequent nose wheel failure. After an inspection in June 1947 revealed signs of structural failure, the FR-1s were withdrawn from service by August 1, 1947. One remains in existence in non-flying condition at the Planes of Fame Air Museum in Southern California, where it has been rumored it may be restored to flight status using the R-1830.

On December 3, 1945 famed British test pilot Eric "Winkle" Brown became the first to demonstrate that a jet-powered fighter could successfully land on an aircraft carrier when he put a De Havilland Vampire F. Mk I equipped with a tail hook on the deck of HMS *Ocean*. Brown was followed in the US Navy by his good friend, fabled Marine flying ace and test pilot Marion E. Carl, who made the first successful takeoffs and landings of a jet aircraft on a US Navy aircraft carrier. Like Brown, Carl used an airplane that had not been originally designed for carrier operation. With deliveries of jet aircraft delayed, the Navy had obtained the use of several Lockheed P-80 Shooting Stars for initial training of pilots on jet aircraft. The Air Force transferred the first of an eventual 50, a P-80A, on June 29, 1945. The aircraft retained their P-80 designation, though they would later be designated TO-1. The Naval Air Test Center at NAS Patuxent River modified one P-80 with a tail hook and catapult gear, and loaded the airplane aboard USS *Franklin D. Roosevelt* (CVB-41) at Norfolk, Virginia, on October 31, 1946. The next day, Major Carl made four deck-run takeoffs and two catapult launches, with five arrested landings. He flew a second series of trials on November 11.

By then, the Navy had taken delivery of its first all-jet fighter prototype, the North American XFJ-1, which would later be known as the Fury. Following a competition of proposals with Douglas and Vought, the North American design was ordered in November 1944. It was a straight-wing airplane with a tricycle landing gear. The flying surfaces were strongly reminiscent of the company's highly successful P-51D Mustang, though the lines were marred by a fat fuselage required in order to hold sufficient fuel for the thirsty jet engine. The prototype XFJ-1, powered by an axial-flow Allison J-35A-2 giving 4,000lb thrust, first flew on September 11, 1946, with the first of 30 production FJ-1s delivered in October 1947, down from an initial wartime production contract of 100.

The aircraft were operated by VF-5A at NAS North Island in San Diego, where they were primarily used in operational testing. VF-5A was commanded by Cdr Evan Aurand, who with XO Lt Cdr R. M. Elder took their FJ-1s aboard USS *Boxer* (CV-21), where they made the Navy's first operational carrier landings at sea by a jet fighter on March 10, 1948.

VF-5A became VF-51 in July 1948 and began regular operation from *Boxer* that August. Experience demonstrated that even when operating from a large fleet carrier, the FJ-1's flight characteristics underscored the need for a more powerful catapult capable of flinging the heavier jet into the air at a higher speed than that which was possible with a World War II-era catapult. While the Fury could be launched without catapult assistance, such an operation required over half the total flight deck in order to achieve flight speed even with the carrier steaming full speed into a stiff wind. On more typical operations on a flight deck crowded with other aircraft, taking off even with a catapult launch meant the FJ-1 was at minimum flight speed when it left the deck and could only perform a perilous, slow climb that was considered too risky for normal operation.

The FJ-1 did not possess a folding wing, which limited its usefulness aboard a carrier, and a 1949 deployment aboard *Boxer* led to the aircraft being removed from first-line service following return from deployment. Most memorably, VF-51 won the Bendix Trophy Race for jets in September 1948, flying seven FJ-1s from Long Beach, California, to the National Air Races in Cleveland, Ohio; the squadron took the first four places, ahead of two California Air National Guard F-80B Shooting Stars. After leaving service with VF-51, the Fury was operated by reserve squadrons, most memorably by the "Weekend Warriors" of the Oakland Naval Air Reserve squadron at NAS Alameda until 1953. Following retirement of their FJ-1s, VF-51 became the first Navy fighter squadron to equip with the new F9F-2 Panther.

Though ordered before the FJ-1, the McDonnell FD-1 (later FH-1) Phantom was the second of the Navy's first-generation of jet fighters to enter service. This was the first McDonnell design to achieve production status, and it began an association between company and service that would extend to the FH-1's descendant, the magnificent F-4 Phantom II.

Two prototypes of the FD-1 were ordered on August 30, 1943, powered by two Westinghouse 19XB-2B engines (later J-30) giving 1,165lb thrust. The first of these flew on January 26, 1945; it was later lost in a crash on November 1, 1945. The second prototype flew early in 1946 and became the first Navy pure jet to successfully take off from an aircraft carrier when it flew from *Franklin D. Roosevelt* on July 21, 1946, flown by Lt Cdr James J. Davidson, though he did not land back aboard. With this success, the production FH-1 powered by uprated Westinghouse J30-WE-20 engines with 1,600lb thrust was ordered; the first of a total of 62 was delivered in January 1947, with the last rolling off the production line on May 1, 1948.

The Phantom entered service with VF-17A (later redesignated VF-171) in August 1947; by May 29, 1948, the squadron operated a full complement of 24 aircraft. In November 1947, FH-1s were delivered to VMF-122 to become the first Marine jet fighter squadron. VF-17A became the first fully operational Navy jet fighter squadron when it deployed aboard USS *Saipan* (CVL-48), commanded by Captain John G. Crommelin (who would gain fame within the Navy the next year as one of the leaders of "The Revolt of the Admirals"), on May 5, 1948 as part of the Operational Development Force.

Front-line service of the Phantom was less than two years due to the limitations of its range, armament and ordnance-carrying ability. The aircraft was unsuccessful as a point-defense interceptor due to the fact its rate of climb and top speed were bettered by the piston-powered F4U-4 Corsair. Additional design deficiencies included an inability to use the newly developed ejection seat, lack of navigational avionics and the fact that the placement of the armament in the upper nose meant pilots were dazzled by muzzle flash. By 1949, the FH-1 was no longer in first-line service, being used as a jet transition trainer in the reserves until 1953.

The public saw more of the Phantom than did the rest of the Navy. During the summer of 1947, three well-known naval aviators, rear admirals Daniel V. Gallery, who had captured U-505, prewar record-setter Apollo Soucek, and Edgar A. Cruise organized a flight demonstration team at NAS Patuxent River named the Gray Angels, a play on the Blue Angels, the official Navy flight demonstration team that was still flying F8F Bearcats. The team was abruptly disbanded in September 1947 after they narrowly missed a low-altitude head-on collision with a formation of racers due to a late arrival at the National Air Races in Cleveland, Ohio. "The Flying Leathernecks" team was organized by VMF-122 and flew air show demonstrations until they were reequipped in 1949.

The third jet fighter developed by the Navy would be the first to achieve complete operational success. Unsurprisingly, it came from the Navy's premier aircraft supplier, Grumman Aircraft. The company had provided every major Navy fighter design other than the Brewster F2A and Vought F4U Corsair since the FF-1 was introduced in 1933. The F9F Panther would become the primary Navy jet fighter from its introduction in fleet service in 1949, through the Korean War, to its eventual first-line replacement five years later by its successor, the F9F-6 Cougar, which was essentially a Panther with swept wings and tail.

Interestingly, the road to the Panther was not as direct as had been the case with the company's previous designs. In 1944, the Navy was concerned about the possibility of the fleet coming under future attack by jet-powered bombers, and was looking for an all-weather fleet interceptor. Grumman's G-75 proposal was a large two-seat, radar-equipped airplane originally powered by eight engines, later reduced to four Westinghouse 19XB-2B engines. The G-75 lost the design competition to the Douglas Aircraft proposal that would result in the F3D Skynight, the Navy's first all-weather interceptor. However, the Bureau of Aeronautics issued a contract to Grumman for two Model G-75 prototypes on April 11, 1946, under the designation XF9F-1, as a back-up to the XF3D-1. Marine Colonel Ross Mickey, one of the Corps' original night-fighter pilots and the wartime commander of VMF(N)-542, was assigned to the initial development team as a member of the Bureau of Aeronautics Fighter Desk. In a 2017 interview, shortly before his death that fall, he recalled: "My contribution to the Panther was that at one of the first meetings, I asked why we were worried about a jet-powered night fighter when we didn't have a good jet-powered day fighter." Once Grumman committed to the idea of a single-engine jet day fighter, Mickey was instrumental in the decision to power the new design with the British Rolls-Royce Nene.

Following the decision to drop the G-75, Grumman presented their G-79 proposal for a single-seat, single-engine jet fighter. In a bureaucratic maneuver to avoid a new proposal process open to other companies, the Navy amended the G-75 (XF9F-1) contract on October 9, 1946 to include three entirely different G-79 prototypes as the XF9F-2 (two flying prototypes and a structural test airframe). The G-79 became the Grumman F9F-2 Panther.

Colonel Mickey's proposal that the new design be powered by the British Nene ran directly into the NIH ("Not Invented Here") bias in the Navy. His argument that the Nene was the most advanced jet powerplant that fit the weight and performance needs of the XF9F-2 eventually carried the day with Leroy Grumman, who convinced the Navy to have Pratt & Whitney obtain a production license from Rolls-Royce, which would get around the congressional prohibition against using foreign engines in US aircraft. Mickey recalled that "the first Nene we got was one of those beautiful Rolls-Royce products that looked like a jewel and was basically hand-built and in no way ready for production."

Production of the license-built engine was assigned to Westinghouse as the J-42, and it was "productionized" the way the Rolls-Royce Merlin had been redesigned for American mass production methods by Packard in World War II as the Merlin-266. American engines that were considered for the Panther included the Allison J-33 and Westinghouse J-34, but they were not considered sufficiently reliable and were less powerful than the Nene. The J-33 was upgraded, and became an alternative powerplant to the Nene. It was used in the 54 F9F-3 Panthers produced in case the J-42 engine failed. However, once the J-42 was shown to be reliable, these aircraft were re-engined with the J-42 and became F9F-2s, though as F9F-3s they became the first Panthers to enter combat aboard *Valley Forge* in July 1950.

At about the same time Grumman was convincing the Navy to obtain the Nene, Mikhail Gurevitch convinced Soviet leaders to productionize the Nene the Soviets had surprisingly received from Britain for Soviet mass production as the VK-1 to power his new design, the MiG-15, which would become the Panther's main aerial opponent in the coming Korean War.

In January 1946, the Navy inspected the prototype mock-up and approved the design to move to actual construction of flight-worthy airframes. The XF9F-2 took flight on November 21, 1947, with Grumman test pilot Corwin H. "Corky" Meyer at the controls. Meyer later recalled that the flight was made under the worst weather conditions he could remember for the first flight of a new design, with a solid overcast at 9,000 feet. Meyer's initial checkout of the aircraft's flight characteristics revealed that stalls presented no problems and that "it performed like a J-3 Cub." The Navy required that Grumman land the airplane at the then-unfinished Idlewild Airport in New York, a requirement that set Meyer on edge since it would mean flying over some densely populated parts of the city in an unproven airplane. In the event, "the Nene performed perfectly and all was well." Meyer's return to Bethpage was delayed while Grumman's only external power jet starter truck was sent over from the factory. The ceiling on his departure was 1,500 feet in light rain, with a forecast ceiling at Bethpage of 3,000 feet. As he recalled, "my second flight was a wild ride." Soon after takeoff, he found himself at 1,000 feet in heavy rain. Executing a turn to the west, he was soon out of the rain and then discovered he was flying at 400mph, rather than the 220mph he had been ordered to maintain on this first test. He returned to Bethpage without further incident. "I had just unintentionally demonstrated 50 percent of the complete structural envelope of the XF9F-2 in a seven-minute second flight under partial instrument conditions. The Grumman Ironworks designers had again come to my rescue."

Over the next 100 hours of flight tests, the Panther demonstrated no problems at all, other than on the eighth flight, when Meyer was allowed to publicly demonstrate the prototype at an air show. On landing and getting out of the cockpit, he noticed fuel gushing from the bottom of the fuselage. The airplane was pulled out of public view and checked. The cause was an incorrect connection of the main fuel line to the nipple of the engine fuel inlet. The clamp had not been secured more than finger tight, and the airplane had made all its flights to date in that condition. "The Good Lord had been very good, not letting that fuel line disconnect until rollout from my eighth flight!"

The only complaint the Navy had about the Panther was insufficient range. Fuel tanks that could be fitted to the wingtips were designed and installed. They had no effect on maximum speed, and actually improved maneuverability in roll. It was determined that the tanks acted as aerodynamic "end plates," thus giving the airplane a theoretically longer wingspan.

One problem didn't reveal itself until gun-firing trials commenced. The Panther's four 20mm cannon armament was carried in the nose, within a nose cone that slid forward on rails to open the gun compartment for servicing. On two occasions involving prolonged firing of the guns, gas built up within the nose cone, sufficient to blow the cone off the airplane. This also happened on a few occasions in service with the early F9F-2 until a more efficient gas ventilation system was developed and installed on the production line.

Initially, the Panther was produced strictly as a day fighter with a limited air-ground capability, carrying six 5-inch HVAR rockets and two 250lb bombs on underwing racks. The F9F-2B was stressed to carry a maximum 1,000lb bomb on the inner pylon, with the outer pylons changed to allow carriage of 250lb bombs in place of the HVARs, and the Panther became an effective fighter-bomber.

Carrier trials using the prototypes were completed in March 1949 and the aircraft was cleared for service in September. Initial operational capability was achieved when VF-51 took delivery of their F9F-3s. The squadron, part of Air Group 5, remained behind for additional training when USS *Boxer* deployed to the Western Pacific in January 1950 in the first carrier deployment to the region since 1948. They and sister squadron VF-52 would go aboard USS *Valley Forge* (CVA-45), which relieved *Boxer* in the Western Pacific in early June 1950, just in time to enter combat in the Korean War when it began a few weeks later. Panthers quickly replaced F8F-1 and F8F-2 Bearcats in fleet fighter squadrons until the piston-engine fighter finally left first-line service in 1951.

In 1950, Grumman began development of the F9F-5. The airplane was externally differentiated from the earlier subtype by a taller tail and larger rudder that cured the directional instability of the F9F-2, and by a 12-inch increase in fuselage length forward of the wing. Additionally, wing fences were installed just outboard of the air intakes; these lowered the stalling speed, which had increased over that of the original F9F-2 due to the increased weight of the F9F-2B, by a very necessary 12mph. Grumman decided to change the engine and chose the Pratt & Whitney J48-P-2, a license-built version of the Rolls-Royce RB.44 Tay, which was essentially an upgraded Nene that gave 6,250lb thrust, a very useful increase from the J-42-P6's 5,750lb thrust. Top speed increased from the F9F-2's 545mph to 575mph. The F9F-5 first entered service in 1952 with VF-781, which saw combat during its deployment aboard USS *Oriskany* (CVA-34) that September.

Seventy-eight percent of Navy jets that saw combat in Korea were Panthers. The F9F-2s and F9F-5s flew 78,000 individual sorties during three years of combat. Two Yak-9s and seven MiG-15s were shot down by Navy pilots flying Panthers between July 1950 and November 1952 for the loss of two F9Fs. Production of the Panther saw 1,382 roll off Grumman's production line by 1953, 616 of which were F9F-5s.

While the Panther was the third Navy jet fighter ordered, it was far and away the most successful of the first generation of Navy jets: as Corky Meyer put it, "not bad for a latecomer."

The fourth jet ordered by the Navy was the McDonnell F2H Banshee series, a development of the FH-1 Phantom. Design of what became the Banshee was initiated before delivery of the production FH-1s, and McDonnell originally intended that the aircraft would be a modified Phantom, sharing as many parts as possible with the earlier design. However, as it became clear that the Navy needed an airplane with heavier armament, greater internal fuel capacity, and increased overall performance, the design department realized they were working on a completely different airplane that would only share a similarity of look with the original design.

Larger and more powerful engines were required, due to the demand for an overall increase in performance. Two newly developed Westinghouse J-34 turbojets, each providing 3,000lb thrust, were placed in the wing root similar to the FH-1. This required a thicker, larger wing with a wingspan of 41 feet 6 inches, rather than the FH-1's 40 feet 0 inches. Twelve inches were added to the fuselage in order to provide space for an increase in fuel capacity by 29 gallons for a total 877 gallons. Rather than arm the new fighter with standard World War II .50-caliber machine guns, the BuAer Fighter Desk had decided the airplane should mount four 20mm cannon low on the nose to correct the muzzle flash experienced with the Phantom. The Banshee's cockpit was designed from the outset to utilize an ejection seat and was pressurized and air-conditioned, while the windscreen was bulletproof glass, electrically heated to prevent frost. Flaps, landing gear, folding wings, canopy, and air brakes operated electrically rather than pneumatically as on the FH-1.

In April 1945, the full-size mockup of the fighter originally designated XF2D-1 was completed, inspected and approved. The Banshee survived the development cutbacks that came at the end of the war; however, development was slowed. The XF2D-1 was not completed until December 1946, taking flight for the first time on January 11, 1947. The prototype demonstrated a climb rate of 9,000ft/min during that first flight, twice what the current fleet fighter, the F8F Bearcat, could do. Later in 1947, the Banshee was redesignated XF2H-1. Fifty-six F2H-1s were ordered that May, with the first one delivered in August 1948, 90 days after the last FH-1 had rolled off the production line. Unlike the prototype, the vertical fin fairing was smaller and the elevators eliminated dihedral. These first Banshees were retrofitted later with J-34s producing 3,150lb thrust.

The F2H-2 that appeared in 1949 was powered by Westinghouse J34-WE-34s providing 3,250lb thrust, giving improved performance over the F2H-1. Additionally, the wing was modified and strengthened to allow carriage of detachable 200-gallon wingtip fuel tanks, while two armament racks were added under each stub and outboard wing, which allowed a maximum load of 1,580lb comprising four 250lb bombs and four 5-inch HVARs.

Initial delivery of the F2H-2 Banshee began in 1949 to Atlantic Fleet squadrons, rather than to Pacific Fleet squadrons; thus the aircraft did not see combat in Korea until 1951, when USS *Essex* brought VF-172 to the war, with the Banshee seeing initial combat that fall. With a service ceiling over 45,000 feet, Banshees were also used as escorts for USAF B-29s. Banshees provided fewer than one in five of the jets that saw combat in Korea and scored no victories in air combat, while three were lost to ground fire by the end of hostilities.

The other new type that would see extensive service in Korea was the Douglas Skyraider. In a military world transitioning to jets, it was an anachronism, since it was powered by a Wright R-3350 radial engine. However, the Skyraider brought an entirely new dimension to close air support. It had a combat load significantly larger than that of either the SB2C Helldiver or the TBM Avenger, both of which it replaced, as well as a fuel supply that allowed either a long range or significant loiter capability over the battlefield, with a ten-hour flight time. The Skyraider would form the backbone of Navy and Marine attack aviation in Korea. The airplane's 20 years of first-line Navy service would see it fight in both Korea and Vietnam, where it would also see service with the US Air Force. The final Skyraider combat missions took place in Africa in the mid-1980s, where it was flown by pilots of the French Armée de l' Air. The Skyraider fully deserved the term "legendary," which was applied to it many times in its 40-year combat career.

During the course of World War II, Douglas had developed several prototypes of "attack" aircraft capable of performing either dive or torpedo bombing. These were unsuccessful for several reasons, primarily due to their size and mechanical complexity. Finally, legendary Douglas designer Ed Heinemann, the man responsible for the SBD Dauntless dive bomber, decided to return to a simple design. His proposal for a single-seat, single-engine bomber was accepted by the Navy, with a contract to produce the XBT2D-1 (Bomber/Torpedo 2nd Design by Douglas) issued July 6, 1944.

Heinemann had started his career as a designer working for Jack Northrop, who was known for creating aircraft that were as light and strong as possible. He would continue Northrop's design philosophy through a career that included the SBD Dauntless, AD Skyraider, A-3 Skywarrior and A-4 Skyhawk. Shortly after he commenced work on the XBT2D-1, Heinemann found an engineering study that supported his philosophy. The report stated that for every 100lb of airframe weight reduction, takeoff run decreased by 8ft, combat radius increased by 22 miles, and rate-of-climb improved by 18ft/min. A ruthless weight-reduction program was applied to the design, searching out weight savings no matter how small. Simplifying the fuel system saved 270lb, eliminating an internal bomb bay saved 200lb, and a fuselage dive brake saved 70lb, while an older tailwheel design saved 100lb. Overall, Heinemann's team removed 1,800lb from the original XBT2D-1. The result was increased performance in all important areas, from speed, range, and maneuverability to warload.

The XBT2D-1, named "Dauntless II" by the company to remind the Navy of the airplane's sire, first flew on March 18, 1945. No significant problems were encountered and manufacturer's trials were finished quickly; the prototype was flown to NAS Patuxent River, Maryland, where the Navy began its evaluation at the Naval Air Test Center (NATC) in April.

The prototype showed such promise that the program survived the cutbacks following the end of the war, and a production contract was signed in the fall of 1945. Following a change in designation to AD-1 (Attack Bomber by Douglas), the first Skyraiders were delivered to VA-19A in December 1946.

The AD-1 through AD-3 were armed with a single 20mm cannon in each wing, with six hardpoints for 5-inch HVARs under the outer wing and a rack just outboard of the landing gear that could carry a maximum 2,000lb bomb, while either a 2,000lb bomb or a 21-inch Mk XIV aerial torpedo could be carried on the centerline station. The AD-4, which entered service just after the outbreak of war in 1950, increased the armament to four 20mm cannon, while six Aeroproducts bomb racks underwing could carry either 250lb bombs or HVARs. Douglas' publicity department made much of the fact that a Skyraider could carry a heavier bomb load than a World War II B-17 Flying Fortress. The airplane carried such a load that VA-195 pilot Ed Jennings would later recall, "we could empty the ship of bombs in three days of intense operations."

Two older existing aircraft would also make worthwhile contributions to the sword naval aviators would wield in Korea.

The Vought F4U Corsair had fully proven its worth in the South Pacific and during the nine months of the Pacific War, where it finally fulfilled its promise aboard aircraft carriers as both an outstanding air-to-air combatant and a formidable fighter-bomber. The F4U-4 variant, which was considerably improved from the earlier F4U-1 series, had only begun to appear in squadron service at the end of the war. While production orders for other aircraft were canceled or severely reduced in the aftermath of wartime victory, the F4U-4 remained in full production.

Vought began development of the F4U-4 in early 1944, in response to concerns voiced by Marines who operated the earlier versions in the Solomons. The airplane came from the factory with the "de-bounced" oleos developed first by VF-17 when the squadron went aboard USS *Bunker Hill*, and was as carrier-compatible as the F4U-1D, which was the final wartime version to see wide service. Power was supplied by the R-2800-18W Twin Wasp dual-stage-supercharged engine, which produced 2,100hp and could be increased to 2,450hp with injection of water/alcohol. Visually, the F4U-4 was distinguished from its predecessors by the "chin" scoop below the front cowling and the Hamilton-Standard four-bladed prop to handle the increased power. Maximum speed increased to 448mph while the climb rate was over

4,500ft/min as compared with the 2,900ft/min of the F4U-1A. The F4U-4 retained the original armament of six .50-caliber machine guns in the wings, and could carry the same external load as the F4U-1D. Initially, the F4U-1D windscreen was retained, though this was changed during production to a flat bullet-resistant glass, which reduced optical distortion. Three hundred F4U-4Bs were ordered at the end of the production run, with armament changed to four wing-mounted 20mm cannon. Vought produced 2,537 F4U-4s by the time production ended in 1948.

Marine and Navy night-fighting/all-weather units were equipped with the F4U-5N Corsair. The first F4U-5 flew on December 21, 1945. The series saw extensive redesign of the forward fuselage to take an R-2800-32(E) series engine with a two-stage supercharger, rated at 2,760hp. Detail improvements over earlier versions included automatic cowl flaps, blower controls, and intercooler doors, spring tabs on the elevators and rudder, heated cannon bays and pitot head, and a completely modernized cockpit; the cowling line was lowered two degrees to improve forward visibility over an even longer "hose nose," while the outer wing panels lost their fabric covering in favor of an all-metal wing, and armament was standardized on four 20mm cannon. Maximum speed was 470mph, with a rate of climb at sea level of 4,850ft/min. The night/all-weather F4U-5N was equipped with an AN/APS-19 radar in a streamlined pod mounted on the starboard wing. Production included 225 F4U-5N, with 72 "winterized" F4U-5NL with wing de-icer boots and anti-icing equipment for the engine produced at the factory and a further 29 F4U-5Ns modified to this standard for a total of 101 F4U-5NL. Marine night-fighter squadron VMF(N)-513 "Flying Nightmares" used F4U-5Ns for night attack and interdiction from their arrival in August 1950 to the end of the war, while the Navy's VC-3 deployed four-plane detachments on the fleet carriers assigned to Task Force 77, where they were primarily used on night interdiction missions.

One final version of the Corsair was used by the Marines. Appearing in early 1952, the AU-1 was specifically modified for ground attack. Based on the F4U-5 airframe, it was powered by an R-2800-83W engine equipped with a single-stage, manually controlled supercharger. Armor plate was extensively applied to the lower fuselage and wing center section to protect the engine and fuel tanks from ground fire, while a total of five underwing stations were fitted under each outer wing, capable of carrying either a 5-inch HVAR or a 250lb bomb. At maximum combat load, the AU-1 weighed 20 percent more than a fully loaded F4U-4, with a bomb load of 8,200lb. Maximum speed unloaded was 389mph, which was reduced to 298mph at 19,700ft when carrying eight HVARs and two 150-gallon drop tanks; with a bombload of 4,600lb and a single 150-gallon tank, maximum speed was 238mph at 9,500ft. Vought produced 111 AU-1s with final delivery in the spring of 1952. They were the last Corsairs to see US service, with the Marines finally bidding a sad farewell to their beloved F4Us in 1957.

Grumman's F7F Tigercat appeared in squadron service just too late to see service in the Pacific War, though one Marine squadron did make it to Okinawa prior to the Japanese surrender. The first twin-engine fighter to be deployed by the Navy, the F7F was the outcome of a design begun with the prewar Grumman XF5F-1 Skyrocket and was ordered into development by the Navy on June 30, 1941. The airplane was big, powered by two R-2800 engines, and was one of the fastest piston-engine aircraft ever produced, with a top speed 71mph faster at sea level than the F8F Bearcat. Grumman's goal with the F7F was to produce a fighter that had a heavier armament and better performance than all other existing fighter aircraft, with a secondary ground-attack capability. Armed with four 20mm cannon in the nose and four .50-caliber machine guns in the wing just outboard of the fuselage, it had underwing hardpoints to carry bombs or HVARs and was capable of carrying a Mk XIV aerial torpedo on the centerline shackles. Following his first flight in the XF7F-1, leading Navy test pilot Captain Fred Trapnell called it "the best damn fighter I've ever flown." It didn't hurt that, aesthetically, it was one of the best-looking twins ever designed.

Unfortunately for the Navy, the carrier compatibility of the F7F was poor with an engine out, even aboard the larger *Midway*-class battle carriers. The Marines, however, were more than happy to take the "castoff," which they saw as a perfect night fighter and fighter-bomber. With a second cockpit installed behind the pilot's position for a radar operator and carrying the AN/APS-6 radar in the nose, performance barely suffered as compared with the single-seat versions. The first night-fighter variants were the 65 F7F-2Ns produced in 1944. The first squadron equipped with them arrived on Okinawa in early August 1945 and later went on to North China, with the Marine expeditionary force sent to maintain order between nationalist and communist Chinese forces. The 60 F7F-3Ns were visually distinguished by a taller vertical fin and larger rudder to cure directional stability issues, with a more bulbous nose housing an AN/APS-19 radar. The F7F-3N, which saw service in Korea between 1950 and 1952, was powered by two R-2800-34W Twin Wasp radial engines giving 2,100hp each. The aircraft had a top speed of 460mph, a rate of climb of 4,530ft/min, a maximum ceiling of 40,400 feet and a range of 1,200 miles. They were only taken out of front-line service when there were insufficient numbers left to operate.

Korea was the first war in which the helicopter saw extensive use. While the Germans had used limited numbers of helicopters during World War II, and the Sikorsky R-4 performed rescue missions in Burma in 1945, it was not until Sikorsky developed the S-51 after the war that helicopter performance was such that there was a serious military use for helicopters.

The S-51 was the first truly successful military helicopter; it would serve the US Army, Air Force, Navy, Marines and Coast Guard, as well as the British Royal Navy and RAF, where it was named "Dragonfly." The S-51 featured a larger rotor, greater load capability with capacity for three passengers and a pilot, and a tricycle landing gear; it first flew February 16, 1946. The USAF ordered 11 as the R-5F, while the Navy ordered an eventual 90 as the HO3S-1, where it soon picked up the unofficial nickname of the "Horse." The first four HO3S-1s were taken aboard USS *Pine Island* (AV-12) in late 1946 to support the first postwar Antarctic expedition, where VX-3 pilot Lt Cdr Walter M. Sessums flew an HO3S-1 that became the first helicopter to fly in the Antarctic. Forty-two more were ordered in 1948 and a similar number in 1949. The HO3S-1 was operated aboard aircraft carriers, seaplane tenders, *Iowa*-class battleships, and *Des Moines*-class heavy cruisers. The Marines operated six HO3S-1s in the first Marine helicopter squadron, HMX-1, where they were used in the utility role, and later deployed a squadron to Korea in 1950. In Korea, the HO3S-1s became lifesavers for Navy pilots as they took over the role of plane guard from escorting destroyers, with dramatic rescues at sea and behind enemy lines, while Marine battlefield casualties who might otherwise have died before they could be treated were evacuated for care, and supplies were airlifted in to remote units.

The later S-55, ordered by the Navy as the HO4S-1 and by the Marines as the HRS-1, was the first really successful transport helicopter. It served with the Marines in Korea from late 1951 to the end of the war for troop transport and supply missions.

While new aircraft were developed, the *Essex*-class aircraft carriers they would operate from, which had seen service in World War II, were modernized during the postwar period, a crucial development to avoid obsolescence as a result of the operational changes that resulted from postwar aircraft development.

The first of a series of modernization efforts to allow the *Essex* carriers to meet changing operational requirements was Project 27A, which was approved by the chief of naval operations on June 4, 1947. The first carrier so modified was USS *Oriskany* (CV-34), which had been unfinished at the end of the war and entered the New York Naval Shipyard in October 1947.

The H-8 hydraulic catapults replaced the H-4s, allowing the launch of heavier aircraft to a maximum weight of 40,000lb. Further changes included strengthening the flight deck and increasing the capacities and dimensions of the flight deck elevators to allow larger and heavier aircraft to be operated, while jet blast deflectors and increased aircraft fuel capacity were added. The 5-inch guns in the four two-gun mounts fore and aft of the island and the four open weapons on the port side of the flight deck were removed to provide more space for aircraft operation and save topside weight, while more capable 3-inch antiaircraft guns in fewer mounts replaced the 20mm and 40mm antiaircraft weapons. The island was substantially rebuilt to a considerably different design. Pilot safety was increased by moving three of the ready rooms from decks just below the flight deck to spaces below the hangar deck; the lesson of *Bunker Hill* and Air Group 84 at Okinawa had been learned. Flight crews heavily laden with equipment could now access the flight deck by an escalator installed abreast of the new island. This provided a single path for pilots to man their aircraft, which prevented confusion with ships' company crewmen rushing up the standard access routes to man battle stations.

Oriskany was followed in the modernization program by *Essex* (CV-9), *Wasp* (CV-18), *Kearsarge* CV-33), *Lake Champlain* (CV-39), *Bennington* (CV-20), *Yorktown* (CV-10), *Randolph* (CV-15), and *Hornet* (CV-12). *Valley Forge* (CV-45), *Philippine Sea* (CV-47), *Princeton* (CV-37), and

Boxer (CV-21) received some upgrades, with the 20mm and 40mm antiaircraft guns being replaced by the newer 3-inch weapons, though they were otherwise unmodified and eventually experienced difficulty operating heavier F9F-5 and F2H-2 aircraft with their H-4 catapults. USS *Leyte* (CV-32) received some minor modifications but retained her World War II look throughout her career. Only USS *Tarawa* (CV-40) would remain completely unmodified from her World War II configuration.

Following the conclusion of the 27A program, the 27C (axial deck) modernization program involved several major changes. The first of these was the replacement of the older hydraulic catapults with steam catapults following successful development and tests of the steam catapult by the Royal Navy. USS *Hancock* (CV-19), *Intrepid* (CV-11) and *Ticonderoga* (CV-14) were involved in this program beginning in 1952. The steam catapult gave a significant improvement over the hydraulic catapults. The catapult uses the principle of the slotted cylinder, with the aircraft to be launched connected to a piston inside the cylinder, which is propelled by steam from the ship's boilers. The system has only been bettered by an electromagnetic catapult in 2017. These ships did not complete their modernization in time to see action in Korea, however, with *Hancock* making the first successful steam catapult launch on June 1, 1954.

The men who became naval aviators in this period would see more change in their profession than any others before or since. Royce Williams, who graduated from Pensacola with his Wings of Gold the same month that Japan surrendered, had soloed in an N3N-3 "Yellow Peril" biplane primary trainer that would continue in that role until it was retired in 1948, and first flew F6F Hellcats and F8F Bearcats as a fighter pilot. Within 13 years, he would fly the F9F-5 Panther and F9F-6 Cougar, moving up in 1958 to the F8U Crusader with a top speed of Mach 1.6, and would command a squadron equipped with the Mach-2 capable F-4 Phantom II by 1962. No other period of aviation saw so much change as that of the 20 years following World War II.

Shortly after the end of the war, Lt (jg) Doniphan P. "Don" Shelton, a 1944 graduate of Annapolis who had spent the final year of the Pacific War aboard USS *St Louis* (CL-49) where he faced the kamikazes throughout the final nine months of the war, finally achieved his dream of becoming a naval aviator when he received orders to report to

Pensacola that September. Shelton graduated with his Wings of Gold in early 1946. The next year he would become a night-fighter pilot and spend the rest of his active flying career working to make naval aviation capable of 24/7 all-weather operations.

Also in September 1945, Midshipman Ed Jennings, a recent graduate of the University of California at Los Angeles, where he had participated in the V-5 program that became the Naval Reserve Officers' Training Corps (NROTC), entered flight training at Pensacola. Jennings wanted to be a fighter pilot, but made the mistake of requesting an F6F Hellcat squadron on graduation in 1946 since he had liked the Hellcat so much during advanced training. Unfortunately, the Hellcat was rapidly leaving first-line fleet service. As he later remembered, "Those who asked for F4Us got them, those who asked for F6Fs got TBMs." Assigned to VT-19 flying the TBM-3E Avenger, one of the last designated torpedo squadrons in the Navy, Jennings became one of the last naval aviators to receive hands-on training in dropping an aerial torpedo, when he made three successful drops of the Mk XIV torpedo. Shortly after, the squadron was designated VA-20A in November 1946 when the Navy decided to combine the various bombing squadrons as attack squadrons. In May 1947, VA-20A transitioned to the Douglas AD-1 Skyraider as the second Navy squadron to do so. The unit was redesignated VA-195 on August 24, 1948. Jennings recalled that he had considerable opportunity to build the flying hours in his logbook while flying the Avenger, but that after transition to the Skyraider the squadron had its flying hours reduced as a result of the deep budget cuts that began throughout the Navy that year. "I didn't feel really competent in the Skyraider until I'd been flying it about a year, since we just didn't get enough flying time to build the momentum that leads to early competence on a new type."

Technological change was not the only thing naval aviation was involved with at this time. On July 8, 1946, Jesse L. Brown, who had fallen in love with flying when he attended an air show at age six with his father, was admitted to the Navy's aviation cadet program when he enlisted in the naval reserve as a member of the Naval Reserve Officers' Training Corps at Ohio State University. The NROTC was the other route to a Navy officer's commission outside of Annapolis. Of 6,500 NROTC cadets at state universities across the United States in 1947, only 14 were African-American. Jesse Brown was one of them.

Brown entered primary flight training at Ottumwa Naval Air Station in Iowa, where he soloed in an N2S-3 Stearman open cockpit biplane trainer with 8.5 flight hours in his logbook. After he completed primary flight training, he was sent to Pensacola for the rest of the program. On October 21, 1948, he pinned on his Wings of Gold and was commissioned an ensign. The event was important, since Brown was the first African-American to become a naval aviator, and a photograph of his graduation was published in *Life* Magazine. Trained as a fighter pilot with outstanding scores in the F6F Hellcat and F4U Corsair, he joined Fighting 32 (VF-32) assigned to USS *Leyte* (CV-32) in January 1949.

Shortly after his arrival in VF-32, Brown was joined in the squadron by another recent Pensacola graduate, Lt (jg) Thomas J. Hudner, Jr., a graduate of the Annapolis class of 1946, where his classmates included James B. Stockdale and James E. "Jimmy" Carter, Jr. Initially uninterested in aviation, Hudner had reported for sea duty in China after graduation and had discovered an interest in flying as "a new challenge" in 1948. He graduated from Pensacola with his Wings of Gold in August 1949, two months ahead of Brown.

At the time, VF-32 was equipped with the F8F-1 Bearcat. During carrier qualifications aboard *Leyte* that spring, Brown took a waveoff from the LSO. Applying throttle too quickly, the Bearcat went into a torque roll. As other squadron pilots stood on the flight deck expecting to see the fighter go over the side into the water, Brown recovered, barely 100 feet above the deck. He then executed a perfect landing, catching the three wire. While still an ensign and one of the most junior officers in the squadron, Brown was promoted to be an element leader. Hudner, who outranked him, became his wingman.

New pilots were not the only naval aviators getting used to the new developments. Lt Cdr Damon W. Cooper, known as "Hutch" by his fellow pilots, reported to Pensacola in 1949 for jet training. A member of the Annapolis class of 1942, which graduated in December 1941 immediately after the Pearl Harbor attack, Cooper had entered flight training immediately after graduation, and became a torpedo bomber pilot, flying combat in the Grumman TBF Avenger and rising to command an Avenger squadron by the end of the war. Cooper had first seen jets when VF-17's FH-1 Phantoms had qualified aboard the USS *Saipan*, where he was a squadron commander, and he quickly saw the airplanes represented the future for his profession. Cooper first flew one of the F-80C Shooting Stars transferred to the Navy from the Air Force as the TO-1 before he completed his training in jets in early 1950. With no squadron command positions immediately available, he reported aboard USS *Princeton* (CV-37) as air intelligence officer, where he met and became friends with Lt Don Shelton, who had recently arrived in the VC-3 night-fighting detachment.

In 1952, Cooper would take command of VF-721 after that reserve squadron's Korean tour and make it a "regular" squadron. Three of the junior officers who served under him during their Korean tour in 1952–53 would later become admirals, and each would later state that they owed their flag rank to the lessons learned in Hutch Cooper's squadron. He would take command of USS *Ticonderoga* (CVA-14) in 1964, just before the carrier took part in the "Tonkin Gulf Incident" and the first strikes of the Vietnam War. By the end of that war, Vice Admiral Cooper would command Task Force 77 in the final actions of the conflict.

By the spring of 1950, barely 90 days before the Korean War would break out, naval aviation was equipped with the aircraft with which the navy would fight the war. It was just in time.

CHAPTER 4

NAVAL AVIATION SAVES ITSELF

At 0830 hours on January 11, 1950, USS *Boxer* (CV-21) cast off from her mooring at NAS Alameda in San Francisco Bay. The carrier passed beneath the Oakland Bay Bridge and the Golden Gate, headed west into the Pacific. *Boxer*'s assignment was to join the US Seventh Fleet in the Far East for a six-month deployment, the first by an aircraft carrier since *Tarawa*'s deployment in late 1948. This would be *Boxer*'s second deployment to the Western Pacific. The carrier had been commissioned on April 16, 1945, but World War II had come to an end before she completed her sea trials and initial training. After joining the Pacific Fleet in August 1945 she had departed San Diego that September to become flagship of Task Force 77, the new designation of what had been known as Task Force 58 during the war, after the Fifth Fleet was disbanded and replaced by the Seventh Fleet. She remained with the Seventh Fleet as flagship until August 23, 1946, during which time she visited ports in Japan, Okinawa, the Philippines, and China. On this deployment, after stopping at Pearl Harbor and Guam, *Boxer* arrived in Subic Bay, the Philippines, on February 5, 1950.

By this time, the once-mighty Seventh Fleet was a shadow of its former self. With its main base at Subic Bay in the Philippines, what was known as the Seventh Fleet Striking Force, Task Force 70, was composed of the heavy cruiser USS *Rochester* (CA-124), Destroyer Division 31, consisting of USS *Shelton*, *Eversole*, *Radford* and *Fletcher*, and Destroyer Division 32, composed of USS *Maddox*, *Samuel L. Moore*, *Brush* and *Taussig*. Task Force 95 operated from the old Imperial Navy base at Sasebo, Japan, with the flagship light cruiser USS *Juneau* (CL-119) and four destroyers of Destroyer Division 91, USS *Mansfield*, *DeHaven*, *Collett* and *Lyman K. Swenson*. These units occasionally participated in exercises with the Royal Navy fleet based in Hong Kong. After the withdrawal of Chiang Kai-shek's nationalist forces from the Chinese mainland to the island of Taiwan, the fleet maintained a sporadic presence in the Taiwan Straits between mainland China and Taiwan, and "showed the flag" in ports throughout the Western Pacific, including South Korea. The arrival of *Boxer* would constitute a major addition to the force. The ship carried Air Group 19, with fighter squadrons VF-191 and VF-192 equipped with the F8F-2 Bearcat, while fighter-bomber squadrons VF-193 and VF-194 operated F4U-4 Corsairs and VA-195 flew new AD-3 Skyraiders. *Boxer* and her escorts would operate as Task Group 70.8.

Events were now moving rapidly in the Far East. The victory of Mao Zedong's communist forces in the Chinese Civil War, with the People's Republic of China having been proclaimed in Beijing's Great Hall of the People on October 10, 1949, had shaken the region, which was involved in other anticolonial struggles. The French had been engaged since September 1946 in a fight against the communist Viet Minh forces of the independence movement led by Ho Chi Minh that sought French withdrawal from all of Indochina in Southeast Asia. South of Indochina, the Dutch had recognized the independence of the former Netherlands East Indies as the new nation of Indonesia in late 1949, ending nearly 400 years of Dutch colonial involvement in the Indies. Both of these independence struggles arose out of the postwar power vacuum following Japanese defeat of the former European colonial powers in 1942.

Additionally, the Philippines had become independent on July 4, 1946 and the government of that country was involved in a civil struggle with the communist Hukbalahap movement. Japan itself was still prostrate from the war, and the Korean peninsula saw a confrontation between communist and anticommunist governments in which each threatened war against the other. Despite the budgetary restrictions imposed after 1948, the US Navy felt it needed to strengthen its presence in the Far East. *Boxer* would make several port visits throughout the region, where the imposing sight of an American aircraft carrier with a flight deck full of airplanes might influence local politics.

Then-Lieutenant (jg) Ed Jennings of VA-195 remembered that though *Boxer* was moving into potentially hostile waters, this did not change things operationally for Air Group 19's pilots. "We still flew a minimum number of hours, which most of us felt were insufficient to insure we were ready should things escalate." *Boxer*'s tour was limited operationally to "show the flag" port visits. In early April, 1950, the ship anchored in the port of Inchon, South Korea, where South Korean president Syngman Rhee and his wife Franziska Donner were entertained aboard while crew members visited Seoul.

An event that would only much later be seen as important occurred on March 5, 1950. *Boxer* had departed Subic Bay and was steaming in the South China Sea with the other ships of the Seventh Fleet Striking Force. That day, the ships entered the Tonkin Gulf, waters that had not seen US Navy ships cut its waters since February 1945 and would be important in the future. All five squadrons were launched; they flew what Ed Jennings later recalled as a "parade formation" from the port of Haiphong down the coast to Saigon on the Mekong River. "We were told the flight was a statement by the United States regarding the situation that existed in Indochina." This unknown flight was the first official indication of United States involvement in the events unfolding in Indochina.

Had President Franklin D. Roosevelt lived, his postwar international plans were strongly anticolonial. He was determined to prevent the British, Dutch and French from reclaiming their former Asian colonies that had been taken by Japan. Instead, he hoped to see these former colonies declared mandates of the new United Nations, which would use its political expertise to help prepare them for independence within a specific time to join the former United States possession, the Philippines, as independent states. Had Roosevelt's far-seeing policy been implemented, much of the anticolonial conflict in the Third World in the years after the end of World War II might have been avoided, with those countries achieving independence without having to turn to the Soviet Union for support, with their independence sponsored by the first anticolonial nation, the United States. Sadly, history is filled with "what ifs" that could have led to better outcomes. While Roosevelt's plans would die with him, the United States did not at first actively support the postwar British return to Burma and Malaya, Dutch return to the Netherlands East Indies, or French return to Indochina.

While the British granted independence to Burma in 1948, the year after India and Pakistan became independent, they retained Malaya as a colony. A communist-influenced independence struggle broke out in 1948 that would last until 1958. Britain would fight this battle alone, with no direct support from the United States. Similarly, no support was given to the Dutch or the French, who were both forced to transfer the limited military forces they had in Europe to deal with the independence fights. During these struggles, the United States refused to allow any of the European colonial powers to use equipment that had been provided during World War II under Lend-Lease.

By 1949, the Dutch had ended their attempt to stop Indonesian independence, and the French were rapidly coming to the point where their military force would be too depleted to continue. Most histories of American involvement in Indochina date the American decision to provide military support to France to the events in Korea in the summer of 1950 that led to the Mutual Defense Assistance Agreement signed between the United States and France on December 23, 1950, which provided for the supply of military equipment by the United States to French forces in Indochina. This change in policy was said to be the result of US belief following the outbreak of war in Korea that "international communism" was on the march in Asia, and the French fight in Indochina was against the same international enemy the United States was fighting in Korea. However, USS *Boxer*'s "parade" in March 1950, a little over three months *before* the North Korean invasion of South Korea, demonstrates that the US decision to provide support to the French was more influenced by the communist victory in China in 1949.

Valley Forge, which had departed San Diego on May 1, relieved *Boxer* at the end of the month. *Boxer* arrived in San Diego, badly in need of overhaul, on Sunday morning, June 25, 1950. Eighteen hours before she docked at North Island, North Korean Forces crossed the 38th Parallel, intending to unify the Korean peninsula by force.

The events of Sunday, June 25, 1950 caught the United States as unprepared as had the events of Sunday, December 7, 1941. In Japan, American military leaders were on weekend leave with their families, away from their commands. A forecast for a weather front heading east across the Sea of Japan with low clouds and heavy rain meant air defense units were not on alert. The first reports of the new war did not arrive at MacArthur's headquarters in Tokyo until 0945 hours, nearly six hours after the first North Korean units had crossed the border.

There was little that could be done other than to flash news of the attack to the operational commands throughout the Far East.

Valley Forge was anchored in Victoria Harbor at Hong Kong when the messenger from the radio room delivered the news to Rear Admiral G. R. Henderson, commander of Carrier Division Five. Orders were soon given to get under way, and the ship departed the crown colony at dawn the next day, headed across the South China Sea to Subic Bay, where she provisioned and refueled. While crossing the South China Sea on June 26, 1950, Admiral Henderson was ordered to form and command Task Force 77.

Fortunately, *Valley Forge* carried a more capable air group than had *Boxer*. The 86 aircraft of Air Group 5 included two fighter squadrons, VF-51 and VF-52, which had equipped with the new F9F-3 Panther the previous January, and were well trained and fully operational on their new mounts. The two squadrons were the only ones to take the F9F-3, powered by the Allison J-33A-8 rather than the J-42, into combat, the 54 produced being later re-engined with J-42s and redesignated F9F-2s. Fortunately, the pilots of the F4U-4B Corsairs of VF-53 and VF-54, and the AD-2 Skyraiders of VA-55, had trained in March with the Marines at Camp Pendleton in close air support for amphibious operations.

The North Korean invasion found the light fleet carrier HMS *Triumph*, with Carrier Air Wing 13's 12 obsolescent Seafire FR 47 fighters of 800 Squadron and 827 Squadron's 12 obsolete Firefly FR I attack aircraft, moored at the old Imperial Navy base in Sasebo, which was now controlled by the Royal Australian Navy as part of the Allied occupation forces in Japan. The carrier was preparing to depart for her return to Britain following a six-month deployment that had seen her aircraft strike communist insurgents in Malaya as part of Operation *Firedog*. The Seafire 47s were the last version of that famous aircraft to serve aboard a carrier, and had proven as fragile on operations as had the previous marks of Seafire over the preceding eight years; 800 Squadron was the only Fleet Air Arm (FAA) fighter squadron that had not yet re-equipped with the newer and far more capable Hawker Sea Fury FB 11. The Firefly Is of 827 Squadron were also the last of their kind on first-line operation, with other FAA squadrons having re-equipped with the FR 4 and FR 5 Firefly sub-types. *Triumph*'s airplanes were old and tired, and all aboard were looking forward to the return home and re-equipment. Upon receipt of the news from Korea, the carrier got under way from Sasebo that afternoon, headed for Hong Kong.

On the evening of June 25, Rear Admiral Sir William G. Andrewes, RN, commander of the Royal Navy's Far Eastern Fleet, anticipating he would receive orders from the Admiralty to participate in whatever Allied response was made to the events in Korea, acted on his own initiative and ordered his ships to concentrate in Japan to await further orders. The British fleet departed Hong Kong at 0130 hours on June 26. *Triumph* met the fleet in the East China Sea and joined HMS *Jamaica* and Admiral Andrewes' flagship HMS *Belfast*, destroyers *Cossack* and *Consort*, and frigates *Black Swan*, *Alacrity*, *Hart* and *Shoalhaven*, and HMAS *Bataan*. They arrived at the Royal Australian Navy base in Kure, Japan, on June 28.

While the Royal Navy was headed for Japan, *Valley Forge*, now the flagship of Task Force 77, departed Subic Bay on June 27 in company with the heavy cruiser USS *Rochester*, Destroyer Division 31's destroyers USS *Shelton*, *Eversole*, *Radford* and *Fletcher*, and Destroyer Division 32's USS *Maddox*, *Samuel L. Moore*, *Brush* and *Taussig,* headed for Buckner Bay, Okinawa.

Events now moved fast. While these ship movements were happening, back in the United States the decision had been made by President Truman to oppose the North Korean invasion. US forces in Japan had been directed to evacuate American personnel from Seoul on June 26, the same day the United Nations Security Council declared the invasion an act of aggression and requested member states to oppose it. The next day, F-82 Twin Mustangs of the 68th Fighter (All-Weather) Squadron shot down three North Korean People's Air Force (NKPAF) Yak-9 fighters, while a flight of F-80C Shooting Stars of the 8th Fighter-Bomber Wing shot down four NKPAF Il-10 Shturmoviks. The Korean War was on, and at that point the North Koreans were winning. T-34 tanks were streaming across the border and the capital at Seoul was under attack by the tough veterans of the Chinese Civil War, who formed the heart of the North Korean People's Army.

By June 29, all Commonwealth forces in the Far East as well as Canada had been ordered to participate in the UN force. Task Force 77 arrived at Buckner Bay on June 30. The next morning, the Commonwealth fleet dropped anchor in the bay. The combined fleet sortied that afternoon, headed for Korea, with *Triumph* and her destroyers joining

Valley Forge as Task Group 77.5. The British cruisers and frigates of the Far Eastern Fleet, now designated Task Group 95.8, were detached to reinforce Task Force 95's USS *Juneau* and Destroyer Division 91's USS *Mansfield*, *DeHaven*, *Collett* and *Lyman K. Swenson* as the West Korean Support Group off the coast of South Korea. Task Force 77's target was the North Korean capital of Pyongyang, the center of North Korean transportation facilities supporting the invaders.

While the fleet steamed northwest toward Korea, General MacArthur was named commander of UN Forces in the Far East. At 0300 hours on June 30, Washington time, MacArthur's cable to the American Joint Chiefs arrived. The words were fateful:

> The only assurance for holding of the present line, and the ability to regain the lost ground, is through the introduction of US ground forces into the Korean battle area. To continue to utilize the forces of our Air and Navy without an effective ground element cannot be decisive.

He concluded that if he was not allowed to send a regimental combat team, followed by two divisions of his forces in Japan to undertake a counteroffensive, "our mission will at best be needlessly costly in life, money and prestige. At worst, it might be doomed to failure." Two hours after receiving MacArthur's message, President Truman approved the commitment of ground troops. At 0800 hours, the news came that Seoul had fallen. On July 1, two squadrons of B-29s flew from Guam to Kadena air base on Okinawa, where they prepared to commence operations over North Korea as soon as possible.

The first American ground units arrived in Korea on July 2. They were ill-equipped and uninformed about the situation and conditions in South Korea. On July 3, the two battalions of Task Force Smith would meet the enemy and be sent fleeing for their lives. By July 9, two American regiments would report 3,000 men killed, wounded, or missing in action, abandoning enough equipment to equip a North Korean regiment. Disaster loomed, and by July 10 mention was first made that UN forces might be forced out of Korea.

Immediately following the victory over Task Force Smith, North Korean leader Kim Il-Sung, who had obtained Soviet premier Josef Stalin's agreement the previous January to the North Korean plan for the forcible reunification of the Korean peninsula, asked the Soviet leader to make good on his promise that Red Air Force units would provide support to the North Koreans in the form of air cover for his army as it drove south. Stalin delayed his answer.

As the eastern sky brightened with dawn on July 3, Task Force 77 reached the middle of the Yellow Sea. The carriers were 150 miles west of North Korea, but were only 100 miles from Chinese airfields on the Shantung Peninsula and less than 200 miles from the major Soviet air base at Port Arthur. Their approach had been undetected.

Mission planners were aware that the North Korean Air Force had been active over Kimpo airfield outside Seoul a week earlier, and that Pyongyang airfield was their main base. The atmosphere in the VF-51 and VF-52 ready rooms was tense with anticipation as pilots considered that they were about to find out just how good their new mount, and they themselves, might be.

At 0500 hours, *Valley Forge* launched combat air and antisubmarine patrols. Forty-five minutes later, *Triumph* launched 12 Seafires and nine Fireflies; their target was the airfield at Haeju. At 0600 hours, 16 Corsairs from VF-53 and VF-54 with rockets underwing and 12 bomb-laden Skyraiders from VA-55 were launched from *Valley Forge*. Their target was Pyongyang airfield. When the piston-powered planes had gained a suitable head start, eight F9F-3 Panthers of VF-51 and VF-52 were sent on their way. With their higher speed, the jets would be the first aircraft over the target.

The intelligence had been right that the North Korean Air Force would be present. When the American jets swept over the North Korean capital, two airborne Yak-9Ps were spotted. The two fighters had no idea what was headed their way. VF-51's Lt (jg) Leonard H. Plog remembered what happened next:

> We arrived at the target before the strike force and our main priority was to destroy any aircraft parked on the airfield. Just as we commenced our strafing runs, one of our pilots reported a Yak-9 taking off, and evidently a couple of others had just gotten airborne.
>
> My wingman and I broke off from our run to go after the Yak that had just taken off. As I lined up on it, out of the corner of my eye I saw another one coming straight at me. He evidently misjudged the speed of my Panther because he missed. Ensign Eldon Brown saw a

> Yak coming in on another element of F9Fs. This was our air group commander, Cdr Peter Lanham, and his wingman, Lieutenant Bill Gorney. Brown closed on it quickly and blew the Yak apart with his 20mm cannon. This allowed me to refocus on my Yak. I lined him up and fired a burst. A split second later, I saw his right wing disintegrate.

Ensign Brown and Lt (jg) Plog had just scored the first two Navy aerial victories of the Korean War. Nine other aircraft on the field were destroyed by strafing.

Minutes later, the propeller aircraft arrived over the field and bombed the hangars and fuel storage tanks. Nearby Haeju airfield was struck by *Triumph*'s Seafires and Fireflies in a rocket attack that destroyed hangars and buildings, though there were no aircraft present. A Seafire that returned with its engine seriously damaged by debris thrown up by its own rockets was the only British casualty. The attackers suffered no flak damage or loss since antiaircraft opposition at both targets was negligible.

Triumph's air wing flew a second strike in the afternoon, hitting railroad lines heading south from the capital, while the rail marshaling yards in Pyongyang and the bridges over the Taedong River were bombed by *Valley Forge*'s Air Group 5. Unfortunately, the bridges were still standing as the planes pulled off their bomb runs, though considerable damage had been inflicted on locomotives and rolling stock.

On July 4, *Triumph* launched 12 Fireflies and seven Seafires, which attacked two dangerous flak lorries that were blown up as well as bridges, gun positions, army barracks, and vehicles spotted on the roads. Antiaircraft opposition was finally encountered, and North Korean gunners holed one of the wing-mounted "combat fuel tanks" on a Seafire and hit one Firefly in the fuselage. On return to the carrier, another Firefly pilot discovered only one main gear would lower and he made a forced landing aboard after the others were recovered.

Two gunboats were sunk by rockets fired by Corsairs of VF-53 and 54, while VA-55's Skyraiders attacked railway bridges and tunnels, strafed locomotives and knocked down one of the Taedong River bridges. Over the target, four Skyraiders were damaged by flak, but the worst damage was suffered when one of the flak-damaged Skyraiders returning to *Valley Forge* failed to catch an arresting wire and bounced over the crash barrier into the deck park, destroying nine aircraft. The ship's HO3S-1 rescue helicopter suffered engine failure and was forced to ditch.

VF-51's Lt William Gortney recalled an amusing event during a mission flown on July 4.

> One of our pilots who had been a farmer back home saw something that didn't look right when he spotted some oddly shaped haystacks in the middle of a field. He and his wingman strafed a couple of them to see what would happen. It turned out they were Yak-9s covered with hay. Later that afternoon, we flew another mission and went straight to that field, where we took out the remaining haystacks.

The Panther pilots also made another unexpected discovery during these operations, as Gortney remembered.

> We discovered early on that any time we popped our speed brakes, which were hydraulically operated like our guns, they took so much hydraulic pressure to open that the guns' safety mechanism was simultaneously activated. So, you could find yourself in a strafing run, wanting to slow down, and when you popped your speed brakes to do so the guns would then refuse to fire.

Grumman came up with a fix and technical representatives came out to the carrier to fix the problem in August.

The North Koreans' rude awakening by the sudden appearance of American and British aircraft 400 miles from the nearest American airfield ashore had a profound effect on the future conduct of the war and its ultimate outcome. Though the physical damage by bombs and rockets was limited, investigations since the war have revealed that the attacks deterred Stalin's decision to send Soviet aircraft to North Korean bases that week, and led the Soviet leader to decide there would be no direct Soviet intervention in the Korean War beyond the surreptitious assignment of "volunteer" fighter pilots to Manchurian bases to deter any UN attack across the Yalu. Further, he also decided the USSR would not provide major support to Chinese forces following China's intervention in Korea. This would be the first chink in the alliance between the USSR and the People's

Republic of China, which would ultimately result in the Sino-Soviet split in 1959.

For the US Navy, the strategic value of a carrier striking force had once again been proven. There was no other force then available to the UN forces that could have struck as quickly and decisively as had USS *Valley Forge* and HMS *Triumph*. The political argument over service integration ended with the Pyongyang strikes. Never again would anyone call for the amalgamation of naval aviation into the Air Force. Naval aviation had saved itself.

CHAPTER 5

DEFEAT LOOMS

With the minimal forces available in the Far East at the outbreak of war, the first priority was the crucial need to expand the available force. The Pacific Fleet in the summer of 1950 was at its lowest level since World War II. Other than *Valley Forge*, which was already in combat, there were only two fleet carriers, *Boxer* and USS *Philippine Sea* (CV-47), and two *Commencement Bay*-class escort carriers, USS *Sicily* (CVE-118) and USS *Badoeng Strait* (CVE-116), at San Diego. Following her deployment, *Boxer* was in severe need of overhaul and was preparing to depart for a four-month period of repair and overhaul at the Bremerton Naval Yard. *Philippine Sea*, which was the last of the *Essex*-class carriers to join the fleet, had been sent from the Atlantic Fleet in May 1949. Her Air Group 11 was similar to *Valley Forge*'s Air Group 5, but the F9F-2 Panthers had only arrived in June, so her fighter squadrons were not as well trained. Importantly, the air group had not had an opportunity to train with the Marines as Air Group 5 had done. Nevertheless, *Philippine Sea* departed San Diego on July 6, arriving in Pearl Harbor five days later, where she and her air group would undergo two weeks of accelerated training before they headed on to the Far East.

Boxer's recently returned Air Group 19 was not ready for combat. VF-191 and 192 were still equipped with F8F-2 Bearcats, though their re-equipment schedule was speeded up. The air group entered accelerated training at NAS North Island when the Panthers arrived in early August and would return to the Far East in November, where their presence would become critical following the Chinese intervention in the war.

USS *Helena* (CA-75) and USS *Toledo* (CA-133) had returned from the Far East in early June. On July 6, they departed Long Beach headed for Japan with their escorting destroyers. By July 8, all the ships the Pacific Fleet possessed that were immediately available had been deployed. That day, Chief of Naval Operations Admiral Forrest Sherman authorized reactivation of ships in the mothball fleet. The days of naval budgetary restrictions were over.

The early air action in Korea had already demonstrated that the F-80 Shooting Star was not able to provide battlefield air support, since the jet was unable to use the primitive Korean airfields. Operating from Japan, they had only a 15-minute loiter time over South Korea, which was completely inadequate to search out and attack battlefield targets. The F-80s had replaced F-51 Mustangs in the Far East Air Force (FEAF) during 1948 and 1949. At the end of June, the Air Force decided that the 8th and 35th fighter-bomber wings would convert back to the F-51 Mustang, which could operate from forward fields in Korea. However, there were only a few of these old fighters left in Japan. F-51s were hurriedly removed from Air National Guard units throughout the continental United States and flown to the Alameda Naval Air Station in San Francisco Bay in early July, where they were quickly treated for corrosion and covered to protect them for transportation to Japan. *Boxer* had already departed San Diego, headed for overhaul in Bremerton, but was diverted to San Francisco, where she docked at Alameda on July 8 and immediately loaded 145 Air Force F-51Ds, six Stinson L-5 Sentinels, and 19 Navy aircraft, while 1,012 Air Force maintenance technicians and support personnel came aboard along with 2,000 tons of crucial spare parts and ordnance.

Boxer departed Alameda at 0800 hours on July 14. Once at sea, the engine rooms were ordered to maintain full speed ahead, and the carrier set a trans-Pacific transit record of eight days and seven hours, arriving at Yokosuka on July 23. The Mustangs and their service personnel and supplies quickly departed, and the first F-51D flew a mission in early August. *Boxer* then departed Yokosuka on July 27 and arrived in San Diego on August 4, breaking the record again with a voyage of seven days, 10 hours and 36 minutes.

In the meantime, events on the Korean peninsula rapidly moved from bad to worse as the North Koreans maintained their momentum.

Following the success of the Pyongyang strikes, *Valley Forge* returned to Buckner Bay, Okinawa, to refuel and replenish, while *Triumph* continued to provide air support to the retreating UN forces. At this point, the Seventh Fleet had no underway-replenishment capability. Oilers, ammunition ships and cargo ships became high-priority items for recommissioning from the reserve fleet, but it would not be until late July that the carriers would be able to refuel at sea from the first oiler to arrive, while rearming at sea only became possible in September.

Valley Forge sortied from Buckner Bay on July 16, headed for the Sea of Japan to support the landing of the 1st Cavalry Division at Pohang. She rejoined *Triumph*, and the two carriers provided air cover for the landings on July 18 without major conflict with North Korean ground forces, though VF-51 and 52 maintained Target Combat Air Patrol (TARCAP) four-plane patrols over the landing site throughout the day. At 1130 hours, 11 Skyraiders, eight Corsairs and 16 Panthers were launched on strikes between Wonsan and Kosong. Two divisions of Panthers strafed Wonsan while the other two crossed the peninsula to Pyongyang to hit the airfield. They found 24 North Korean Yak-9Us and Il-10s lined up on the field in two rows. Each plane made at least two strafing runs, and claims were submitted for three to four enemy aircraft definitely destroyed and most of the rest damaged. A second sweep of Pyongyang airfield by two more divisions of Panthers resulted in the destruction of five more enemy aircraft and others damaged. No antiaircraft fire was encountered.

The Skyraiders and Corsairs ranged along the coast south of Wonsan, searching for targets of opportunity. Several rail cars were destroyed and VA-55's Ensign Harris destroyed a railroad bridge with a direct hit by a 1,000lb bomb. The rail yard at Kosong was also strafed.

A second strike was launched in the afternoon. The Skyraiders and Corsairs hit the Pyongyang railroad lines, while a final rocket attack by Corsairs at Pyongyang airfield left eight Yak-9Us burning on the field. Other Skyraiders and Corsairs struck the oil refinery at Wonsan with bombs and rockets and left the complex burning with several secondary explosions.

Before dawn on July 19, *Valley Forge* launched 13 Skyraiders, 19 Corsairs and 24 Panthers to hit the Bongun Chemical Factory at Hamhung. At Yonpo and Sondok airfields, the Panthers spotted 12 Yak-9Us and Il-10s at the former and 15 at the latter. Strafing attacks at both fields left six burning at Yonpo and seven at Sondok. The Skyraiders hit the chemical factory but were unable to accurately judge results due to cloudy conditions over the port. Attacking Corsairs set the target afire with napalm. Three locomotives were spotted and destroyed by strafing, along with several other items of rolling stock.

The last operational rescue of a downed pilot by a Sea Otter amphibious seaplane happened when VF-53's Lt (jg) Muncie was hit in his oil cooler by flak over Hamhung and he was forced to ditch off the harbor in very rough seas. *Triumph*'s Lt Cdr Peter Cane and Chief Petty Officer Aircrewman G. O'Nion made the rescue despite the adverse sea conditions. Cane lost the starboard stabilizing float on touchdown, but the rescue was quickly accomplished and Cane successfully got off without dipping the floatless wingtip in the water, which would have caused a crash that might have killed all three aboard, and returned to *Triumph*. The US Navy was sufficiently impressed by his feat to award him the US Air Medal.

A photo-recon strike assessment mission was flown, during which the two fighter Corsairs escorting the photo-recon Corsair spotted nine locomotives in a railyard south of the port and strafed them, destroying three. The mission continued on up the coast until they turned back 50 miles from the Manchurian border. On the way home, a train was spotted outside a tunnel and was exploded by strafing. A second strike flown in the afternoon encountered bad weather and was unable to hit the port, though it found and bombed a small railroad bridge.

Shortly after the initial Pyongyang strikes, the American and British fliers had agreed to divide up the aviation responsibilities of the task force. The Corsairs and Skyraiders had a longer range than the Seafires and Fireflies and assumed responsibility for attack missions. The Seafire had a superior climb rate to that of the Panther and took over Combat Air Patrol, while the Fireflies flew antisubmarine patrols around the clock in all weather. *Triumph* flew an average of 27 CAP sorties and ten antisubmarine sorties per day during this period. Inevitably, such intensive flight operations led to operational accidents; four Seafires were written off in heavy landings. The Spitfire was a lightweight, fragile design; it had never been intended for operation in the difficult conditions aboard an aircraft carrier. The Seafires were particularly prone to damaging the rear fuselage in hard landings, which resulted in wrinkling the fuselage skin. They were only kept flying by the maintenance personnel who used a special micrometer gauge to determine if a wrinkle was sufficient to ground an aircraft or to allow continued flying.

While the rule was that, on reaching a certain level, "wrinkled" airplanes were to be grounded on the spot and returned to Britain to be rejigged, this was not possible in wartime conditions. The squadron engineering officer and his team stretched the rules to keep the airplanes operational. Following the Inchon invasion, *Triumph* was relieved of her assignment. All of 800 Squadron's surviving Seafires were grounded immediately, marking the end of the Seafire's front-line service with the Fleet Air Arm.

Overnight on July 21 the two carriers transited Tsushima Strait and took up position 100 miles off the southeastern Korean coast to provide air support to UN forces that were retreating toward what would become the Pusan Perimeter. On July 22, Corsairs and Skyraiders were launched to range over the lines on armed reconnaissance, while the Panthers were employed on strikes north of Seoul. Unable to establish radio contact with forward air control parties on the ground, the Skyraiders and Corsairs attacked secondary targets south of Seoul. Despite poor weather, one camouflaged locomotive was spotted and destroyed, while two Corsairs attempted to destroy another by skip-bombing, which they spotted being moved into a tunnel, but they were unable to determine the results. VA-55's Ensign Paul Stevens spotted a truck and strafed it, but in the poor visibility he held his dive too long and crashed, with the airplane exploding on impact to become the squadron's first combat fatality. VF-52 Panthers strafed enemy aircraft spotted at Kimpo airfield and left several burning. Over Inchon, a division of Panthers spotted two locomotives and destroyed them by strafing. At Kimpo, the pilots encountered what they described as the most intense AA fire yet and several Panthers came back to the ship with flak damage.

The next day, the carriers departed for Sasebo to refuel and rearm. This was accomplished within eight hours of arrival in port and they returned on July 26 to resume battlefield air support missions. That afternoon Ensign M. E. Thomsen of VF-53 was forced to crashland his Corsair when his oil cooler was hit by ground fire while attacking ground targets. A RESCAP (Rescue Combat Air Patrol) was set up, but there were no aircraft or helicopters in the area that could rescue him before dark. The next morning, the Corsair was spotted burned out by enemy troops overnight. Thomsen became Air Group 5's second loss of the war.

The carriers moved north off Pohang-Dong, where they provided air support to other retreating UN forces on July 27. This time they were able to establish radio contact with ground controllers and were directed against North Korean troops and tanks, with good results. The strikes continued on July 28, with both armed recce missions and strikes under ground control.

A tragic "blue on blue" incident occurred on July 28, when radar spotted possible enemy air activity and four Seafires on combat air patrol were vectored to investigate, only to find a flight of American B-29 bombers. Visually, the Seafire resembled the Yak-9, with which it shared an in-line engine and bubble canopy. As the British fighters closed on the bomber, one gunner opened fire and hit a Seafire in its rear fuel tank, setting it afire. The pilot immediately bailed out, but not before he was burned on his face, arms and shoulders. Unfortunately, the sea conditions were appalling, which made a rescue with the Sea Otter impossible. The downed pilot was forced to remain in his raft about an hour until the destroyer *Eversole* arrived on the scene and pulled him to safety. Luckily, the Sea of Japan is not freezing cold in the summer.

As the North Koreans continued their relentless advance and ill-prepared American Army units fell back again and again during this dark period of the war, the only thing that saved the UN forces was control of the air. The North Korean Air Force did not appear over the battlefield after the Pyongyang strikes. While the Air Force and Navy kept up their attacks on North Korean supply lines, B-29s were not ideal for battlefield interdiction and there were no strategic targets in North Korea beyond the army and its supplies. Close air support was almost nonexistent; the Air Force Shooting Stars could only make attacks against targets that were known to the pilots at takeoff from their Japanese bases, since ground-air battlefield communications and competent forward air controllers were not readily available in most instances.

The lack of ground-air communication also hindered the Navy in supplying air support, but the pilots of Air Group 5 were able to put their training with the Marines back in March and April to use when a ground unit could put out air control panels. The situation would gradually change as the F-51D Mustangs *Boxer* had delivered found their way onto operations in August, following the establishment of the Pusan Perimeter. The Mustangs could operate at advance airfields inside the perimeter during the day, returning to Japan overnight. Also, *Valley Forge*'s VC-3 detachment operated F6F-5Ns and AD-3Ns that flew "night heckling" missions, which were freelance patrols over a particular area, during which they frequently found enemy transport units taking advantage of the darkness to resupply the North Korean troops and attacked them with bombs and gunfire. These missions would be the last combat operations by Grumman Hellcats in Navy service.

As weather conditions deteriorated with the approach of a typhoon, *Valley Forge* and *Triumph* retired to Buckner Bay to refuel and rearm. During the 12 days they had spent giving support to the ground forces, Air Group 5 claimed 33 enemy aircraft destroyed, 27 locomotives, 75 trucks, three tanks and 11 other vehicles. They had attacked the Wonsan oil refinery, four power stations, and dropped two railroad bridges, as well as making attacks against enemy troops on the battlefield.

In a month of combat, *Valley Forge* had learned operational lessons that would be used by the carriers and air groups to follow. When launching a strike, the slower propeller planes were launched, with the slow Skyraiders taking off first, followed by the faster Corsairs. The Panthers were launched 60–90 minutes after the propeller planes, so that they would catch up before the strike aircraft reached the target. With a 32-plane strike by Corsairs and Skyraiders, two or three four-plane divisions of Panthers – 8–12 aircraft – would fly as escort and sweep, to deal with enemy antiaircraft gun positions. The early F9F-2 and F9F-3 Panthers did not have the capability of carrying bombs, but could carry three 5-inch HVARs on detachable racks under each wing.

It was discovered that the best ordnance load for a Skyraider on a close air support mission was one 1,000lb general purpose bomb, one 220lb fragmentation bomb, and one napalm canister, with either ten HVARs or 100lb bombs on the outer wing stations. The F4U-4s carried either a 500lb bomb or a napalm canister on one under-fuselage rack, and a 150-gallon drop tank and either eight HVARs or 100lb bombs underwing.

The most important reinforcement would involve the two CVEs assigned to the Pacific Fleet, which supported the Provisional Marine Brigade when it entered combat in the Pusan Perimeter on August 7.

USS *Sicily* (CVE-118), commanded by famed naval aviator Captain John S. Thach, had only arrived in San Diego from her previous assignment with the Atlantic Fleet on April 28, and had been scheduled to participate in antisubmarine warfare in Hawaii and Guam that summer. On July 2 she departed San Diego and headed for Guam to provide antisubmarine defense. On July 18, *Sicily* sent the Grumman AF-1S and AF-1W Guardians of her antisubmarine squadron ashore in Guam and departed for Japan two days later, arriving in Kobe on July 30.

USS *Badoeng Strait* (CVE-119) had been decommissioned in 1946, then recommissioned in January 1947 and assigned to the Pacific Fleet to test new antisubmarine warfare equipment and aircraft. In late 1949, she had also performed refresher carrier training to Marine fighter squadrons at Marine Corps Air Station El Toro, north of Camp Pendleton. Assigned to a summer midshipmen's cruise to Hawaii, *Badoeng Strait* had only just arrived in Pearl Harbor the day before war broke out. The midshipmen were hurriedly transferred ashore and the little carrier returned to San Diego on July 4, where she was assigned to take Marine Air Group 33 to Japan. By July 10, the 48 F4U-4 Corsair fighter-bombers of VMF-214 "Black Sheep" and VMF-323 "Death Rattlers," as well as 24 F4U-5N night fighters of VMF(N)-513 "Flying Nightmares," along with eight Stinson OY-2 "Sentinel" observation planes and four Sikorsky H03S-1 helicopters of VMO-6 were aboard the carrier.

The aircraft would provide air cover for the Marine Provisional Brigade, which had been ordered to be formed on July 2 for immediate transfer to Korea. On July 11 and 12, the brigade's ground forces embarked in the attack transports USS *George Clymer* (APA-27), *Henrico* (APA-45), and *Pickaway* (APA-222), the attack cargo ships USS *Whiteside* (AKA-90) and *Alshain* (AKA-55), and the landing ship docks USS *Gunston Hall* (LSD-44) and *Fort Marion* (LSD-22). Air group personnel and equipment went aboard the Military Sea Transportation System (MSTS) transport *General A. E. Anderson* and the attack cargo ship USS *Achernar* (AKA-53) at Terminal Island in Long Beach.

The evening of July 12, ten days after receipt of the warning order to organize the Provisional Brigade, the two LSDs carrying the tank and amphibious tractor companies sailed from San Diego. The remainder of the convoy departed San Diego and Long Beach on

July 14. The brigade arrived in Kobe on July 31, where *Badoeng Strait* was greeted by *Sicily*, which had arrived the day before. On August 2, VMF-214's ground support personnel transferred to *Sicily* and the carrier departed for Korea that evening. The next morning, Lt Col Walter E. Lischeid and his "Black Sheep Squadron" pilots brought their Corsairs aboard. Two days later, on August 5, Major Arthur Lund's VMF-323 landed aboard *Badoeng Strait*, which had departed Kobe that same day; during the two-day transit to Pusan, the Marines participated in refresher air training to ready themselves for sustained operations. Famed World War II pioneer night-fighter pilot Major J. Hunter Reinburg took his F4U-5Ns of VMF(N)-513 to Itazuke AFB, where the Corsairs were soon involved in "night heckling" missions over the Pusan Perimeter. Over the next four weeks the squadron flew 662 sorties in support of the Marine Provisional Brigade and put 333 close air support night missions over US Army and ROK units.

Marine air support didn't work without the essential ground communications and tactical air control for close air support. When Major Christian C. Lee's Marine Tactical Air Control Squadron 2 (MTACS-2) offloaded in Kobe, an LST was waiting for them. They were joined by the ground echelon of Major Vincent J. Gottschalk's VMO-6, while the squadron's OY-2 Sentinels were trucked to Itami air base where they were loaded aboard C-47s and flown to Pusan.

On August 3, VMF-214 flew its first combat mission when Squadron XO Major Robert P. Keller led eight F4U-4s off *Sicily* at 1630 hours to hit the communist-held village of Sinban-ni. The next day, 21 sorties were flown against troop concentrations, road traffic and bridges in the Chinju and Sachon areas. VMF-323 flew its first strikes on August 6 against troop concentrations west of Chinju and along the Nam River. The Marine aviators were fully engaged in combat operations within 96 hours of their arrival in Japan. Because the carriers were close offshore, the squadrons could answer requests for support within 30 minutes of receiving such a call. The two carriers each operated a four-plane division on call over the battlefield throughout the daylight hours. The Marines had proven that their plans for rapid deployment made them the most combat-ready force in the American military.

On August 11, VMF-323's Corsairs joined Air Force F-51 Mustangs for what came to be called "the Kosong Turkey Shoot." A VMO-6 pilot spotted 100 troop-carrying trucks and jeeps of a North Korean motorized regiment. The planes arrived overhead quickly and hit both ends of the formation, trapping the troops and vehicles; they then proceeded to destroy every vehicle with rockets, napalm and strafing. Their success was crucial in denying reinforcement to the North Korean forces attacking on the Naktong Front.

While the squadron was participating in the "turkey shoot," the Corsair flown by Captain Vivian Moses was hit by ground fire that set the engine afire. Moses was not seen to get out before the plane hit the ground and exploded. Ironically, the pilot who was now the Death Rattler's first fatal casualty of the war had also been shot down the day before, becoming the squadron's first combat loss. He had been rescued by a VMO-6 helicopter and returned to *Badoeng Strait* just the night before.

Philippine Sea's two weeks of training in Hawaii was completed on July 24 and the next day she departed Pearl Harbor bound for Buckner Bay, Okinawa, arriving on August 3. On August 4, she departed Okinawa en route to Korea in company with *Valley Forge*. Rear Admiral J. F. Hoskins, commander of Carrier Division 3 aboard *Valley Forge,* assumed task force command.

Arriving off Pusan on August 5, the carriers and their air groups were immediately involved in combat. Air Group 11's first strikes hit the towns of Iri, Mokpo, and Kunsan, with emphasis on the rail and highway bridges at Iri, which were now important for the North Korean Army's lines of communication and supply. The F9F-2 Panthers of *Philippine Sea*'sVF-111 and 112 ranged over roads leading to the Naktong, strafing any targets of opportunity they found. After refueling on August 8, Air Group 11 was sent against targets in the Inchon-Seoul area, where the pilots first ran into enemy antiaircraft fire that was considered "moderate in intensity." On August 11 they hit the Seoul marshaling yards, and two days later attacked their first targets in North Korea when they bombed the Pyongyang marshaling yards, destroying four locomotives, probably destroying three more and damaging nine.

That same day, what became known as the First Battle of the Naktong broke out when North Korean troops were able to cross the Naktong River, which was now shallow due to the summer heat and lack of rain. Two North Korean divisions were soon established in a bulge south of the river defense line. While *Philippine Sea*'s aviators were sent against targets outside the immediate battle area, *Valley Forge*'s experienced

Air Group 5 fliers were tasked with battlefield air support over the Pusan Perimeter.

The intensity of combat all along the Pusan Perimeter at this time meant that *Philippine Sea*'s Corsairs were finally tasked with close air support missions for UN troops along with the *Valley Forge* fliers. Their training in Hawaii paid off as the two carriers' four squadrons of Corsairs managed to keep at least two four-plane divisions over the battlefield throughout daylight hours, on call for the Army and Marines. If a division was not called on during their time over the perimeter, they would hit targets of opportunity that had been spotted before returning to their carrier.

During the battle *Philippine Sea* and *Valley Forge* each launched over 100 sorties per day depending on the weather, with 140 sorties logged on August 12. All five carriers – *Valley Forge*, *Philippine Sea*, *Triumph*, *Sicily* and *Badoeng Strait* – operated off Pusan to provide all-out support for the desperate fighting on the Naktong Front.

While the air support missions flown by the Navy fliers were valuable, the Marine fliers were the only pilots who had sufficient training and experience to provide battlefield close air support right in front of the lines. Thus, the air support responsibilities were divided, with Navy fliers from *Philippine Sea* and *Valley Forge* concentrating their attacks against the enemy supply lines and troop concentrations behind the Naktong Front away from the front lines, while the Marines operating from *Sicily* and *Badoeng Strait* were committed to battlefield close air support. Since both the Marines and Navy were operating from aircraft carriers close to the Naktong battlefield, they were much better in providing relatively constant air cover and close support than the Air Force squadrons, which still operated from Kyushu. The F-80 fighter-bombers could only remain overhead for ten minutes; the newly arrived F-51 Mustangs could loiter over the front for 45 minutes, but at the cost of a reduced ordnance load. The primitive dirt strip at Pohang was the only operational airfield inside the perimeter at this time; while F-51s could land to refuel and rearm during the day, they had to return to Japan at sunset.

The Marines had learned close air support the hard way in the Pacific War. Their system of forward air control placed a Marine aviator, assigned as Forward Air Controller (FAC), with each Marine company. These FACs had radio contact with aircraft, and could use their "pilot's eye" to describe ground detail to pilots overhead in terms that let the fliers drop ordnance accurately within less than 100 yards of the "mud Marines" they were supporting. Training in air support had been maintained after the war, and any Marine platoon commander was capable of calling in air attacks if necessary.

Since Task Force 77 did not have the ability to perform underway replenishment beyond refueling, the carriers had to depart the battlefield to resupply ammunition and ordnance. The old Imperial Navy base at Sasebo soon became the main re-equipment facility. After a brief stop in Sasebo to rearm on August 14, *Philippine Sea* returned to operations the next day and joined *Valley Forge* in the Sea of Japan, where the carriers spent two days striking coastal transport targets on the east coast to support the evacuation of the ROK Third Division from Yongdok, during which strikes were made on enemy troop concentrations threatening the evacuation. The two carriers then transited Tsushima Strait to the west coast, where more strikes were flown against Seoul.

The Naktong Front was stabilized by August 16 when the North Korean troops that had managed to cross the Naktong had been driven back across the river. The Provisional Marine Brigade provided the decisive force after they entered combat in Korea on August 7, eight years to the day since the Marines had landed on Guadalcanal. The victory would not have been possible without the air cover provided by the five carriers and their fliers.

On August 19, Air Group 11's CAG, Cdr R. W. Vogel, was shot down and killed while attacking the main railroad bridge south of Seoul. The next day Ensign C. L. Smith was lost when his Corsair exploded when hit by antiaircraft fire. Both fleet carriers retired to Sasebo on August 21.

On August 25, *Philippine Sea* returned to Korean waters in company with *Valley Forge*. Rear Admiral Ewen, ComCarDivThree, assumed command of Task Force 77 and *Philippine Sea* was now the fleet flagship. The next two days were spent in the Sea of Japan attempting to provide battlefield air support, but lack of communications with ground units hampered these operations. On August 28 the carrier refueled en route to the west coast, and on August 29 the water works in Chinampo and Pyongyang were attacked.

VF-112 Panther pilot Ensign Allen "Boot" Hill had reason to remember a mission flown on August 26.

> We were working ten kilometers north of Pohang. At the beginning of a routine road recon, a Marine Forward Air Controller (FAC) spotted us and contacted our squadron commander, who was flying lead. A Marine company was on the verge of being overrun. The enemy troops literally covered half the hill as they approached the ridgeline. They were clearly visible to all of us, so there was no doubt of who was friendly and who wasn't. We were loaded with 5-inch HVARs and both high-explosive-incendiary and armor-piercing ammo for the 20 millimeters. After two dry runs the mass of enemy troops separated sufficiently to allow the Marines to put down colored panels. We used two guns and one rocket at a time, the intention being to make as many runs as possible before we exhausted our ordnance. It also served to keep their heads down till Marine reinforcements arrived.
>
> On each pass we could see at least 100 enemy troops out in the open, standing up and shooting at us with their rifles. We departed the area way below bingo fuel after a major convoy of Marines arrived on the scene. We each made 16 strafing runs, and all four Panthers sustained numerous hits from ground fire. The FAC continued to thank us till we were out of range.
>
> On our return, the skipper had to report to both the ship's captain and the admiral to explain why we were ten minutes late and had only 600 pounds of fuel remaining. Within hours, however, messages confirmed the FAC's statement that we'd saved the Marine company and accounted for more than 200 enemy troops killed. It was a very rewarding experience to know we had saved a lot of Marine lives.

The worst crisis of the Pusan Perimeter began the night of August 31, when the North Koreans commenced their strongest offensive, later known as the Great Naktong Offensive to the North Koreans and the Second Battle of the Naktong to Americans. The North Korean troops had been pushed beyond their limits, with the fighting strength and effectiveness of most of the original units that had crossed the 38th Parallel greatly reduced in the Pusan Perimeter fighting. They faced major logistical problems – shortages of replacement soldiers, weapons, equipment, and food – due to UN air attacks on their transport system. At the same time, however, troop morale was high and the army had just enough supplies on hand to stage a final large-scale offensive.

The battle began with a simultaneous assault, launched from five locations across the entire perimeter; caught by surprise, the UN forces were almost overwhelmed.

The battle continued as the North Koreans attacked Kyongju while Taegu and Ka-san were again surrounded. Troops managed to recross the summer-shallow Naktong River and again threaten Yongsan. They reinforced the ongoing battle at Masan, focusing on crossing the Nam River and attacking the village of Haman.

By the morning of September 1, the situation for UN troops was even worse than it had been two weeks earlier. Most of two communist divisions had managed to cross the river, and the North Korean troops had broken out of what had previously been the bulge as they advanced four miles east along the Yongsan road. A major emergency was at hand.

The North Korean attack found both *Sicily* and *Badoeng Strait* in Sasebo replenishing. VMF-214 and VMF-323 were ashore at nearby Ashiya air base. The weather was deteriorating as Typhoon Jane approached southern Japan. By September 3, the typhoon was centered over southern Honshu as the fighting along the Naktong intensified. With the heavy rains from the typhoon, it was impossible to fly air support missions from Ashiya, and it was impossible for the Corsairs to get back aboard their carriers until the storm moved on.

Task Force 77 had just completed underway refueling in the Sea of Japan overnight, and *Valley Forge* launched a strike the morning of September 1 against the Inchon-Seoul area. When the cry for help was received, *Valley Forge* recalled her strike. Despite being 200 miles from the Pusan Perimeter, *Philippine Sea* launched 22 Corsairs that arrived over the Naktong battlefield while the ship steamed toward Pusan at 27 knots. With the Marine FACs providing guidance, and despite the bad weather, *Philippine Sea*'s Corsairs were able to hit enemy positions in close proximity to the Marine forces. Shortly thereafter, 12 Corsairs and 12 Skyraiders from *Valley Forge* arrived. Guided by the FACs, six Corsairs destroyed two tanks and 15 field artillery pieces, damaged two other tanks, and strafed enemy troops. The bomb-laden Skyraiders attacked Kwangju and Samchonpo.

The Marines were able to continue their advance toward Yongsan despite the lack of air support. Following the successful Navy aerial intervention just before nightfall, the North Koreans, disorganized by the shock of the unexpected attacks, began to retire, but the night was miserable with cold, driving rain. Fortunately, the tide had been turned, as the North Korean 9th Division, fresh from garrison duty and deficient in training, continued their retreat. The weather began clearing overnight and by early morning the routed North Koreans were hit hard by artillery that caused many casualties, while the weather over Japan cleared enough to allow the Marine Corsairs to arrive over the perimeter in time to strike the injured enemy before they could regroup from the artillery barrage and continue their retreat. The Provisional Brigade had advanced a mile and a half by mid-day, recovering much of the US gear that had been sacrificed as the enemy abandoned the equipment.

After both *Valley Forge* and *Philippine Sea* had flown maximum-effort strikes over four days since the first emergency request for assistance was made, the weather closed in again on September 5 and the two carriers departed for Sasebo. Fortunately, the worst of the crisis was over.

While the British fliers were not as skilled at close air support as were the Navy and Marines, HMS *Triumph* was able to attack North Korean transport facilities further up the peninsula. The carrier launched her first sorties in this new role on August 13. Two Seafires flew a tactical photo-recon mission to the ports of Mokpo and Kunsan, where they shot up two small ships. That afternoon, Seafires photographed Inchon, then got photos of the main North Korean naval base at Chinampo the next day, where three ships were spotted moored in the estuary. Six Seafires and six Fireflies returned in the afternoon and attacked what they discovered was a camouflaged minesweeper, a 2,000-ton freighter and an 800-ton coaster, all three being substantially damaged by rockets.

The Fireflies flew a naval gunfire support spotting sortie on August 15, to spot fire for HMS *Jamaica* when she shelled shipping at Inchon. Four days later, two Fireflies discovered a camouflaged 150-ton motor junk armed with heavy antiaircraft guns, which they set afire after firing 16 60lb rockets. They then turned inland and strafed railway wagons and oil storage using their cannon. On August 16 four Seafires flew an armed recce to Chinampo, where they followed the river to Pyongyang, but found no worthwhile targets.

By the end of August, *Triumph*'s air wing was nearly used up. The number of airframe wrinkles on the Seafires was now alarming following several heavy landings resulting from pilot exhaustion and bad weather, leaving only nine Seafires available for operations; HMS *Unicorn* had only six replacements left aboard. The Fireflies were in equally perilous condition, since only a few usable Firefly Is had been found throughout the Far East after being stored in tropical conditions; most were unserviceable due to the rubber seals in the hydraulics and engines having rotted away in the five years since the end of World War II.

Triumph's only fatality during the entire deployment happened on August 29 when Lt Cdr MacLachlen, commanding officer of 800 Squadron, was mortally injured after a Firefly crashed into the deck barrier, sending fragments of its wooden propeller through an open porthole on the island, to hit MacLachlen as he stood inside.

Triumph arrived in Sasebo on August 30 to replenish stores. She took aboard the last six Seafires and eight Fireflies, which had been held back as the least serviceable of replacements, but there were no other spares available in the entire Far East.

The flight deck was a remarkable sight, with many of the Fireflies still in their World War II camouflage and insignia carrying the contemporary black and white identification stripes. When she departed Sasebo the next day, *Triumph* escorted *Unicorn*, which carried the 27th Commonwealth Infantry Brigade to join the fighting in the Pusan Perimeter.

Triumph returned to operations off Korea on September 3, with the Fireflies flying armed reconnaissance sorties. After nearly three months of war, the North Koreans had learned the value of camouflage to thwart UN aircraft. Two Fireflies came across three strange-looking, heavily vegetated "islands," which they discovered were camouflaged North Korean gunboats. These were attacked with rockets and left heavily damaged. Over the next several days, Fireflies flew naval gunfire-spotting sorties for HMS *Jamaica* and HMS *Charity* as they shelled targets in Inchon and Kunsan. *Triumph* steamed through Tsushima Strait to the east coast on September 6 to fly air support missions for UN forces in the Perimeter in the absence of *Valley Forge* and *Philippine Sea* while they replenished at Sasebo.

Aircraft serviceability was adversely affected by the constant strain of operations, which led to the grounding of four more Seafires due to skin wrinkling in the increased operating tempo over the Perimeter, leaving only five capable of operations. Most of the Seafires that were grounded came from the last group of replacements, which demonstrated they had not been in good shape when brought aboard to begin with. The five serviceable Seafires quickly were reduced to three when the pilot of one was forced to bail when his hook failed to lower for landing, while a second was lost on landing when only one of its undercarriage legs lowered. The crew of another Firefly were lucky to escape when their Firefly was badly damaged in a heavy landing where it bounced off the deck and ended up dangling over the side after its hook engaged an arrester wire. On September 9, two Seafires and two Fireflies flew a successful strike against Koryu airfield despite the bad weather; a small strike like this was now a maximum effort operation, since only a handful of aircraft were still operational. *Triumph* was relieved on September 10 when *Philippine Sea* returned, allowing the carrier to return to Sasebo where the damaged aircraft were repaired by cannibalizing the grounded planes.

Despite their best efforts, the North Koreans were unsuccessful; at the conclusion of the Second Naktong Battle the NKPA was a much weaker force, vulnerable to counterattack.

The first nine weeks of battle in Korea came to an end. The United States had paid a heavy price when untrained and inexperienced occupation troops had been committed against experienced, combat-hardened veterans in the mistaken belief that no army from what was seen as a small, backward Asian country could stand against a Western army, no matter how poorly trained, equipped and led. The result was several hundred casualties that shouldn't have happened and over a thousand men taken prisoner, the majority of whom would not survive three years of communist captivity.

Reinforcements were on the way, however. On August 24, Marine Air Group 12, which included the Corsairs of VMF-212 and 312, went aboard the transport carrier USS *Sitkoh Bay* (TCVE-86) for transportation to Japan. Commander of MAG-12 was Colonel Richard C. Mangrum, who was very experienced at leading airmen in difficult situations, having brought VMSB-232's Dauntlesses to Guadalcanal at the end of August 1942, where their presence saved the 1st Marine Division from the Imperial Navy's repeated attempts to retake the island. *Sitkoh Bay* arrived in Kobe on September 15 and the two squadrons transferred to Itami AFB between September 16 and 18, just in time to move to Pusan and take part in the reversal of fortune that came with the invasion of Inchon.

In the first 60 days of an unexpected war, naval and marine aviation, and the Navy and Marine Corps themselves, had demonstrated once again their capability to effectively project and maintain power that neither the Air Force nor the Army had shown themselves able to accomplish. The two services had indeed saved themselves. All talk of "unification" back in Washington was put on hold in the face of the Korean emergency, and would never be revived as more than political talking points at elections to come. Everyone now knew the world was not going to come to a frozen halt in the shadow of the atomic bomb, with all conflict held at bay through possession of the "ultimate weapon."

CHAPTER 6

INCHON

Much has been written over the years about the "miracle at Inchon," the most difficult, most risky amphibious operation in history. It is rightly considered the crown jewel of Douglas MacArthur's expansive career as regards his military leadership. That it came directly at the end of 90 of the worst days in American military history makes the achievement that much more notable. His contemporaries who had to deal with him saw it as the perfect example of the problem with MacArthur: that on the one hand he was militarily brilliant while at the same time being completely untrustworthy politically. It would lead directly to the greatest disaster of the war within 70 days of its success.

MacArthur was able to sell the Joint Chiefs on the idea of invading Inchon with the argument that the enemy would never expect anyone to attempt "the impossible," citing General James Wolfe's landing at the cliffs of the Plains of Abraham – where the French thought such an action impossible – to take Quebec during the Seven Years' War.

Chinese leader Mao Zedong had been certain since late July that UN forces would make a major military move to change the situation in Korea. As a result of this belief, Mao had assigned Lei Yingfu, who was considered one of the ablest members of the People's Liberation Army (PLA) General Staff, to study the situation and attempt to predict what MacArthur might do next. It was not difficult for the communists to obtain the necessary intelligence; Japanese dockworkers were largely communist in their political affiliation and Japan was a sieve of espionage. Chinese intelligence was quickly able to discover that supplies were arriving in the country, which implied an amphibious operation.

Given MacArthur's amphibious operations during World War II, this appeared highly logical.

Considering the difficulty of the overall situation in Korea and MacArthur's history of leapfrog amphibious operations in New Guinea in World War II, Lei estimated that MacArthur planned to land behind the Pusan Perimeter, which would allow UN forces to capture most of the North Korean Army. After examining six possible sites considered suitable for such an operation and analyzing MacArthur's history in the Southwest Pacific, Lei determined the target was Inchon. He cited Inchon as most likely for two reasons: it was the best site strategically, while being so operationally difficult no one would expect the invasion there, which had been a hallmark of MacArthur's operations in New Guinea.

On the same day that Army Chief General J. Lawton Collins and Navy CNO Admiral Forrest Sherman gave preliminary agreement to MacArthur's proposal, Mao held a meeting of the Politburo in Beijing. Lei Yingfu presented his findings in a formidable briefing that ended with his citation of the same historical analogy of Wolfe at Quebec MacArthur himself had used with the Joint Chiefs! Following Lieu's briefing, Mao ordered the commanders of the People's Liberation Army to complete preparations to enter the war should UN forces not stop at the 38th Parallel. Mao passed Liu's report to Kim Il-Sung, whose military advisors assured him it was impossible to mount such an invasion.

An elaborate deception campaign had been created to draw enemy attention away from Inchon, in order to make it appear to the North Koreans that the invasion would be made at Kunsan, 105 miles south of Inchon. On September 5, the Far East Air Force sent bombing raids by B-26 Invaders against roads and bridges around the port, which was followed up that night by an attack by B-29s. These were followed by more raids over the next ten days. During the night of September 12–13, HMS *Whitesand Bay* (F633) landed United States Army Rangers and Royal Marines of 41 Commando on the docks at Kunsan, where the raiders made certain the enemy noticed the visit.

Throughout the period, *Sicily*, *Badoeng Strait* and *Triumph* operated offshore, striking targets along the west coast away from Inchon. Between September 4 and 7, *Triumph* and *Badoeng Strait* launched strikes between Kunsan and the 38th Parallel that concentrated on electrical transformer stations, railroad bridges, and rolling stock.

By this time, *Triumph*'s aircraft were in such bad condition that only the most experienced pilots were allowed to fly them, in hopes they would not fall victim to operational accidents aboard ship. *Triumph* left the west coast on September 7 to conduct two days of strikes off Wonsan on the east coast, with her place taken by *Sicily* the next day. On September 8, *Sicily* turned south, joining *Badoeng Strait* off Inchon the evening of September 9. On September 10, VMF-214 and 323 were given the mission of burning off all the cover on the west side of Wolmi-Do island, which was to be the first invasion goal. Each Corsair carried two 150-gallon drop tanks full of napalm on multiple missions. Over the two days of attacks, a total of 95,000lb of napalm were dropped on the island, destroying 90 percent of the top cover on the western side. The island was only some thousand yards long by nearly that amount wide; by the second day of attack, the island appeared to be aflame over its entire surface.

VMF-214's 1st Lt John S. Perrin remembered sighting several enemy trucks on the island during the first attack. His flight of Corsairs went low and slowed as much as possible, then chased the trucks as their drivers attempted to evade attack by driving wildly through the streets of a small built-up area. "They thought a moving target would have a better chance, but we managed to drop napalm just ahead of them that they drove into."

Both escort carriers departed the evening of September 11 for a quick turnaround at Sasebo so they could remain on call throughout the coming invasion. They were back on station the evening of September 14, the night before D-Day.

Philippine Sea and *Valley Forge* departed Sasebo on September 11 to provide air cover for the initial pre-invasion operations following their arrival off Korea on September 13.

While Inchon presented difficulty to the invaders due to the extreme tides, the operation also presented difficulty for the carriers tasked with providing the necessary air support. Such air cover had to come solely from the carriers, since Inchon was beyond the range of Air Force aircraft operating from Japan. The problem was the Yellow Sea. Unlike the Sea of Japan off the east coast of the Korean peninsula, which is deep right up to the shoreline, the Yellow Sea is shallow. When *Valley Forge* had attacked Pyongyang in July, the carrier was unable to operate closer than 150 miles to the west coast of Korea, because the seabed was too shallow for the operation of a large fleet carrier. With careful navigation, Task Force 77 was able to close to within 60 miles of Inchon, but even with this the air support provided by the small carriers – *Badoeng Strait*, *Sicily* and *Triumph*, which could operate closer to shore – would be crucial in providing "on call" close air support for the invaders.

Joint Task Force 7, the Inchon invasion force, was commanded by Vice Admiral Arthur D. Struble, an amphibious warfare expert who had taken part in the Normandy invasion and the landings at Leyte Gulf during World War II. On September 12, Struble's flagship, USS *Rochester* (CA-124), arrived off Inchon with Admiral Higgins' Gunfire Support Group, Task Group 90.6, composed of *Rochester*, Higgins' flagship USS *Toledo* (CA-133), Royal Navy light cruisers HMS *Jamaica* and *Kenya*, and long-serving destroyers *Collett*, *De Haven*, *Gurke*, *Henderson*, *Lyman K. Swenson*, and *Mansfield*. They were accompanied by the first Canadian ships to arrive in Korea, destroyers HMCS *Cayuga*, *Athabaskan*, and *Sioux*.

The American and Canadian destroyers entered Inchon Harbor on September 13. At 1300 hours, they opened fire on the island of Wolmi-Do while aircraft from Task Force 77 provided air cover and bombed the island. They soon discovered the port was much more lightly defended than had been expected, though North Korean artillery did take the ships under fire and inflicted significant damage on three of the US destroyers, killing one sailor and wounding six. *Collett* was hit nine times by 75-millimeter artillery, wounding five, while *Gurke* was hit three times without casualties and *Lyman K. Swenson* also took three, with one man killed and one wounded. The destroyers retired, and the cruisers moved into position and began firing on the island for three hours, after which they moved back offshore at 1640 hours.

Admiral Struble ordered a second day of softening up and the cruisers and destroyers moved into the harbor at dawn on September 14. Supported by numerous strikes from Task Force 77 aircraft, the ships bombarded the island, firing from 1255 hours to 1422 hours and expending 1,700 rounds. On both days, the Fireflies from *Triumph*'s 827 Squadron operated as fire-control spotters for the ships, greatly adding to their accuracy.

Following her post haste return after delivering F-51s to Japan, *Boxer* entered the Mare Island Naval Yard in San Francisco Bay to undergo such repairs as could be quickly made, forgoing the thorough overhaul that had been scheduled a month before. Following these repairs, she embarked Carrier Air Group 2, an all-props group composed of four fighter squadrons equipped with 64 F4U-4B Corsair fighter-bombers and one attack squadron equipped with 18 brand-new AD-4 Skyraiders in addition to three AD-4W early-warning Skyraiders in the VC-11 detachment, three F4U-5N Corsairs in the VC-3 detachment and three F4U-5P photo-recon Corsairs operated by the VC-61 detachment.

Boxer headed west again for Korea on August 24. En route, she managed to avoid Typhoon Kezia, though this slowed her trip. She arrived in Sasebo on September 4, she arrived in Sasebo, too late to provide air support in the Battle of Pusan Perimeter, but in time to join the fleet of 230 US ships assigned to Operation *Chromite*, where the addition of her fighter-bombers would be crucial to the success of MacArthur's counterattack.

Just after Task Force 77 arrived in the Yellow Sea on September 14 after transiting the Tsushima Strait from the Sea of Japan, radar picked up a bogey 60 miles away at 1330 hours. The unidentified aircraft's speed was 200mph at an altitude of 12,000 feet, headed south toward the carriers. Since the task force was 100 miles from the Soviet naval base at Port Arthur, the aircraft was assumed to be from the Red Air Force. A division of F4U-4B Corsairs from *Valley Forge*'s VF-53 were vectored to intercept. Thirty miles from the fleet, the pilots spotted two aircraft in close formation; one turned north while the second continued on south. The pilots identified the intruder as an "A-20 Havoc," a US light bomber supplied to the USSR during World War II under Lend-Lease, and spotted the Red Star insignia that identified the aircraft as definitely Soviet-flown. The Russian pilot realized he had been spotted and decided to make a run for it, turning east toward the North Korean coast and diving to pick up speed. Division leader Lt (jg) Richard E. Downs led the others in pursuit. Given clearance by *Valley Forge* to shoot, Downs attacked and missed, but his wingman's four 20mm cannon set the intruder afire and it spun into the Yellow Sea. Fortunately, no radio signals from the plane had been detected, so it was believed the fleet had not been spotted.

On the same day, Marine Air Group 12 arrived in Kure aboard USS *Rendova* (CVE-114). The F4U-4 Corsairs of Lt Col Richard W. Wyczawski's VMF-212 and Lt Col J. Frank Cole's VMF-312, and the F7F-3N Tigercat night fighters of Lt Col Max J. Volcansek, Jr.'s

VMF(N)-542 were quickly off-loaded and their aircraft were moved to Itami air base where they commenced missions over the Pusan Perimeter by September 17, when the UN forces there began their offensive to break out and roll up the North Korean forces in the peninsula south of Inchon.

At 1238 hours on September 15, as Air Group 2 was preparing for launch, *Boxer* suffered a failure of the Number Four main reduction gear, which necessitated securing the Number Four main engine and locking the propeller shaft. Her top speed was reduced to 26 knots with a maximum emergency speed for short periods of 28 knots. Fortunately, this was sufficient to operate her air group.

Pilots from the three Task Force 77 air groups reported no enemy aerial opposition during the initial invasion, and very little antiaircraft fire. All of *Boxer*'s aircraft returned unharmed, as did those of *Philippine Sea* and *Valley Forge*. During the course of the operation*, Philippine Sea*'s Air Group 11 only suffered damage to four Corsairs and four Skyraiders, which demonstrated the lack of enemy antiaircraft defenses. Beginning at 0545 hours, *Valley Forge* launched five strikes hourly of F4U-4Bs and one of AD-3 Skyraiders against targets in Inchon. Throughout the day, the Marines of VMF-214 and 323 flew missions over the harbor area. Both Navy and Marine aviators reported "good TAC" from the ground controllers in putting the aircraft onto the enemy positions.

At 0630 hours on September 15, the 3rd Battalion, 5th Marine Regiment, led by Lt Col Robert Taplett, with nine M26 Pershing tanks from the 1st Tank Battalion, landed on Wolmi-Do. The island was under Marine control by noon, with only 14 casualties. This was followed by the 1st and 2nd battalions of the 5th Marines landing on Red Beach, where they had to use ladders to scale the sea wall; the Marines suffered eight dead and 28 wounded.

Legendary Marine Colonel Lewis "Chesty" Puller led the 1st Marine Regiment ashore at Blue Beach with the evening high tide at 1700 hours; by the time they arrived, the North Koreans had surrendered and the regiment suffered only a few wounded. By the next day, the 5th Marines moved off the beaches and entered the city of Inchon. On September 17, a reinforcing North Korean force of six T-24 tanks and 200 troops was spotted on the road from Seoul to Inchon and was attacked by VMF-214 Corsairs near the village of Kansong-ni with rockets and napalm; heavy casualties were inflicted as the "mud Marines" of

2nd Battalion cheered the Corsairs from their position two miles away. The squadron lost Captain William F. Simpson, Jr., who became "target fixated" when he attacked the tanks and crashed at the end of his attack run. In the billowing smoke, the pilots thought they had destroyed all six tanks, rather than the three they actually burned out. The North Koreans abandoned the remaining three, which were destroyed when the ground forces moved into the area.

On September 16, *Boxer* suffered the loss of a Corsair flown by Ensign J. D. Brogan that experienced engine failure on takeoff. When it crashed into the sea, the plane caught fire, but Brogan was able to get out with only minor burns and was picked up by the plane guard helicopter. Later that day, Lt Cdr D. C. Taylor also experienced engine failure and ditched in Inchon Harbor, where he was rescued by a helicopter. The next day, Lt (jg) E. R. Painter suffered engine failure on takeoff and crashed his Corsair near the carrier, where he was picked up by the helicopter. The only combat loss was the AD-4 Skyraider flown by Ensign R. R. Sanders that was hit by flak; he crashed behind enemy lines, from where he was successfully rescued by helicopter. Air Group 2 suffered their first death when Lt (jg) Franklin Smith, Jr. missed his cut on landing and caught his wingtip on the flight deck; the Corsair cartwheeled and went into the water inverted, where it sank before Smith could get out.

September 17, 1950 saw one of the truly amazing events of the carrier war in Korea, when VF-112 Ensign Edward D. Jackson, Jr. and his wingman, Ensign Dayl E. Crow, were launched from *Philippine Sea* to strafe an airfield near Pyongyang, a grass strip littered with burned out Yak-9s and Il-10s. Jackson spotted a locomotive, which they strafed and set afire, then the two Panthers turned to fly down the Han River. Jackson soon spotted 75 boats on the river. After taking small-arms fire from the vessels, Jackson led Crow on a low strafing pass, passing over the boats at an altitude of 50 feet. Pulling up from the run, Jackson flew through a trap made of steel cable that had been strung across the river to "clothesline" low-flying aircraft.

The Panther ripped through the cables as though they were string while the wire strands whipsawed around Jackson's starboard wing and fuselage, punching out the windscreen and canopy and shredding the tip tank. The impact knocked Jackson unconscious and he received severe facial injuries. The first indication to Crow of the problem was when the Panther faltered as Jackson lost control; he quickly spotted the crushed tip tank and saw the mist of blood coating the inner surface of the shattered canopy. Twenty seconds later Jackson came to and found himself blinded by shards of Plexiglas and blood. Crow used his radio to provide guidance so that Jackson could climb high enough for safety. As the two jets flew toward the Yellow Sea, he was fading in and out of consciousness.

Crow quickly determined it would be impossible for Jackson to eject over the sea with any hope of survival and contacted *Philippine Sea*. It was decided that an attempt would be made to bring Jackson aboard, and the flight deck was cleared of aircraft. Crow was able to bring Jackson to the ship, where he took close formation on the left wingtip with his section leader, and talked him through the approach. Jackson could only lower his left flap due to the damage to the right wing, which unbalanced the Panther. LSO Lt (jg) Les Bruestle guided the two planes on final approach and gave the cut. The blinded Jackson managed to catch the Number 4 wire as Crow pulled away to make his own approach and trap. The deck crew quickly surrounded the plane and Jackson was carefully pulled out and carried below to the sick bay. With 36 stitches to his face and head and an emergency blood transfusion, Jackson survived.

In 1954, Jackson saw the movie *Men of the Fighting Lady*, which was officially based on a later event in 1952 involving two Skyraider pilots in which one pilot was blinded by a flak hit and guided to a safe landing ashore by the other. For the movie, the Skyraiders became Panthers and the final event was the blinded pilot landing aboard his carrier. Jackson was convinced for the rest of his life that the film's story was based on his own experience, but there was never any formal recognition by the film makers that this was so. The lack of such acknowledgment does not mean Jackson was wrong, since such recognition would have required the film's producers to purchase the rights to his story, incurring an additional expense – something Hollywood hates.

The Marines arrived at Kimpo airfield by the evening of September 17. By mid-morning of September 18, the field was declared secure. Shortly after, a VMO-6 HO3S-1 landed with General Lemuel Sheppard and his chief of staff, Colonel Victor Krulak, aboard. The first Marine units crossed the Han River and entered Seoul on September 19. Later that day, the F7F-3N Tigercats of VMF(N)-542 were flown in from Japan, followed by the F4U-4 Corsairs of VMF-212, while C-47s and C-54s of FEAF's Combat Cargo Command began flying in aviation gasoline and ammunition. The Corsairs and Tigercats began flying combat missions the following day, with the Tigercats drawing first blood when they spotted and destroyed two locomotives near Seoul on an early morning mission.

The good fortune that the air groups had experienced during the invasion evaporated as the action moved inland and the mission became roving armed recce and deep support strikes. Unlike at Inchon, the enemy had plentiful antiaircraft weapons around Seoul and north of the city. The four Marine squadrons, VMF 214, 232, 212 and 312, flew 50 close support sorties on September 18 and 19 as the ground Marines ran into more difficult opposition as they moved closer to Seoul and prepared to cross the Han River on September 19.

Boxer lost Lt (jg) C. E. Seeman on September 20 when his Skyraider was hit by antiaircraft fire north of Seoul. He was not seen to get out before the plane exploded when it hit the ground and burned. Three days later, Lt Cdr L. W. Chick, XO of *Philippine Sea*'s VA-115, was hit by antiaircraft fire north of Seoul. He managed to parachute and was picked up by a VMO-6 HO3S-1. The next day, Panther pilot Lt C. C. Dace was hit by flak near Chorwon. He managed to stay airborne until he got back out over the Yellow Sea and ejected. Dace was in the water for seven hours before he was picked up by USS *Chevalier* (DDR-805). On September 26, Lt (jg) E. F. Bass experienced engine failure while trying to land aboard *Boxer*. The Corsair went into the water and he got out before it went under, to be picked up by the carrier's helicopter. On September 29, an F9F failed to catch the arresting wire when landing on *Philippine Sea*. The jet went through all the barriers and crashed into the planes parked forward, damaging seven and seriously damaging five, while injuring five flight deck crewmen. That same day, *Boxer* suffered her final fatality of the operation when Ensign C. C. Howell bailed out after his Corsair was hit by antiaircraft fire. He was seen to land on the ground safely, but it was later learned he was captured by the North Koreans, who shot him in the back; his body was discovered by Marines when they advanced a few days later.

On September 23, Lt Col Lischeid led a flight of five VMF-214 Corsairs to bomb and rocket a developing enemy counterattack on Hill 105. It was one of six close air support missions the squadron flew that day. The next day, VMF-323 dropped 500lb bombs on an enemy formation only 100 yards in front of their infantry comrades. That same day, VMF-212 set a record of 12 missions in one day and a total of 46 individual aircraft sorties. That the squadron was able to effect a turnaround so fast as to allow this level of operation while based on an airfield recently recaptured and still largely in ruins other than the runways made the record even more impressive.

Carrier operations were not the only offensive strikes carried out by the Navy in Korea. Throughout the summer, the cruisers and destroyers of Task Group 96.5, the Korea Support Group, had shelled North Korean transport and supply depots and given fire support to the UN forces within the Pusan Perimeter. On September 12 the various task groups operating under Commander Naval Forces Far East (ComNavFE) were consolidated. The Korea Support Group, Task Group 96.5, was upgraded to become Task Force 95, now titled the United Nations Blockading and Escort Force, commanded by Rear Admiral Allan E. Smith. The West Coast Support Group, now Task Group 95.1, continued under the command of the Royal Navy's Admiral Andrewes, while the East Coast Support Group, Task Group 95.2, was commanded by Rear Admiral Hartman. Hartman's cruisers and destroyers had bombarded Samchok on September 14 and 15 in preparation for Eighth Army's offensive in the Pusan Perimeter. On September 15, the heavy cruiser *Helena* and destroyer *Brush* were joined by destroyer *Maddox* and USS *Missouri* (BB-63), the first battleship to arrive in Korea. Five weeks earlier, she had been moored to Pier 88 in the North River, carrying midshipmen on a summer training cruise. Firing 52 16-inch shells, she destroyed one Samchok railroad bridge and damaged another. This work by the big gun surface ships would continue throughout the war.

In the Pusan Perimeter, the Eighth Army offensive began on September 17 when ROK soldiers crossed the Hyongsan River south of Pohang supported by 298 16-inch shells fired by *Missouri*; they quickly captured the city and advanced toward Yongdok. On September 20, the North Korean II Corps began to withdraw on the Naktong Front and two days later the US Army's 24th Infantry Division crossed the Naktong. On September 25, the North Korean Army began a general retreat. The pursuers of summer were now the pursued. VMF(N)-513, which was still based at Itazuke in Japan, gave considerable support with night heckling operations to find and attack the retreating enemy as they tried to use the cover of darkness to protect them from marauding UN aircraft.

On September 20, some 10,000 North Korean troops had been moved to Seoul, and heavy house-to-house fighting ensued. By September 25, the enemy's main line of resistance was broken as the 5th Marines broke through the ridge line; over 2,000 NKPA troops were killed in the process, while the 7th Marines patrolled the hills north of the city to prevent further enemy reinforcements. During this fighting *Sicily* put five Corsairs of VMF-214 on station over the city every two hours, while at Kimpo VMF-212 set a record for combat sorties. It was a bad day for the fliers, with three squadron commanders shot down and VMF-214's CO, Lt Col Walter E. Lischeid, killed. Seoul was declared liberated on September 27, 92 days after the North Koreans had begun the war with their invasion. MacArthur turned over control of the city to South Korean President Syngman Rhee on September 29, and by the end of the month there was no organized North Korean resistance in South Korea as disorganized survivors continued to stream north.

The 1st Marine Air Wing had turned in an outstanding performance in the fighting since their arrival in early August. After 33 days of combat in the Pusan Perimeter and the Inchon invasion between September 7 and October 9, when Eighth Army connected with X Corps and South Korea was declared restored, the Marines had flown 2,774 sorties, almost all of which were close support missions in the main battlefield area, to both Marine and Army ground units. Brigadier General Homer S. Kiefer of the Army's 7th Infantry Division stated:

> Allow me to reemphasize my appreciation for the outstanding air support received by this division. The Marine system of control … approaches the ideal and I firmly believe that a similar system should be adopted as standard for Army Divisions.

With Seoul secured, Douglas MacArthur had achieved what he had been ordered to do by the UN Security Council resolution in June: expel the North Korean forces from South Korea. At this moment, the war could have been ended as a resounding victory for collective action under the auspices of the United Nations, exactly as the world body had been established to do five years earlier.

Such, however, was not to be.

Even as MacArthur's staff planned the Inchon invasion, National Security Council Memorandum NSC 81/1 was approved by President

Truman on September 11. The Memorandum authorized UN forces to cross the 38th Parallel, either to force the North Korean Army to withdraw from South Korea or to inflict a decisive defeat on them. Additionally, General MacArthur was authorized to prepare contingency plans for the occupation of North Korea following such defeat. The day the Marines successfully went ashore at Inchon, MacArthur received the basic provisions of NSC 81/1 from the Joint Chiefs. On September 27, with Seoul liberated and the North Korean Army now retreating from the Pusan Perimeter in a rout, he received the crucial directive authorizing an offensive into North Korea: "Your military objective is the destruction of the North Korean Armed Forces." The granting of such wide authority to Douglas MacArthur, perhaps the most willful general in US history, was tantamount to giving an order that these events should happen. On September 29, newly installed Secretary of Defense General George C. Marshall sent MacArthur a message that concluded: "We want you to feel unhampered strategically and tactically to proceed north of the 38th Parallel." MacArthur replied confidently: "I regard all of Korea open for our military operations unless and until the enemy capitulates." Following what was later described as "some amount of inter-allied consultation," France, the United Kingdom, Australia, New Zealand and Canada backed the American advance into North Korea.

The decision was the result of a political explosion that had happened in the United States over the previous seven months, following a speech given in March by an obscure United States senator from Wisconsin, Joseph R. McCarthy, in which he charged that there were active communist agents within the State Department. By August, his charges had created a domestic political firestorm. The "Who Lost China?" wing of the Republican Party, led by California Senator William Knowland, who was known as "the senator from Formosa," took the opportunity provided by McCarthy's sensational demagoguery to attack the Truman administration for its failure to bring the Chinese nationalist forces of Chiang Kai-shek into the war. In an August speech that reflected the traditional American right-wing fears of national masculinity going "soft," McCarthy charged that "prancing minions of the Moscow party line" had been placed in charge of American China policy in the State Department while Secretary Acheson was a "dilettante diplomat who cringed before the Soviet colossus."

By the time NSC 81/1 was approved by President Truman, Secretary of State Acheson and Defense Secretary Marshall, all three were under relentless Republican political attack. Any decision to stop at the 38th Parallel would have been decried as being "soft on communism," a charge the administration could not survive, since the Democrats were fighting to maintain their slim majorities in the House and Senate in the 1950 off-year elections that were six weeks away. Once again, as had happened with President Roosevelt's decision to support MacArthur's invasion of the Philippines out of domestic political considerations in 1944, domestic American politics would have a major unintended effect on world affairs.

A series of events in the first weeks of October would determine the course of the rest of the war in Korea.

On October 1, the first ROK units crossed the 38th Parallel. As soon as the news of this arrived in Beijing, Chinese Premier Zhou En-Lai called a press conference at which he announced that if UN units continued to move into North Korea, China would intervene in the war. The next day, Zhou met with the Indian ambassador, K. M. Panikkar; during the meeting he stated the Chinese government would not "stand aside" if UN forces crossed the 38th Parallel and invaded North Korea. He went further and stated that if non-Korean forces crossed the border, China would move troops into Korea.

The warning went unheeded by the military and political leaders in Tokyo and Washington, who dismissed Ambassador Panikkar as a leftist and likely "pro-communist" representative of a country they saw as an international leader of the anti-colonialist forces. The fact that the ambassador was well known in diplomatic circles as a determined non-communist meant nothing to the geniuses of American "intelligence" in the CIA, who labeled him an "innocent instrument" being used by the Chinese, who were judged to be not serious in their threats by the same analysts who had been surprised by Mao's victory the year before.

Such reactions were made easy by a Gallup poll released in the last week of September that showed 64 percent of the American public supported crossing the parallel. The United Nations was equally dismissive. Two days after the publication of Zhou's warning, the General Assembly voted in favor of a resolution that stated since "unification has not yet been achieved" all appropriate steps should "be taken to ensure conditions of stability throughout Korea." This signaled a crucial change in the UN forces' mission from repelling aggression to uniting Korea by force.

Since the Soviet delegation had returned to the UN in August, there was no way to take further action in the Security Council, where the Soviets held a veto; all further action would come in the General Assembly, where there were no vetoes. On October 7, the General Assembly voted in favor of a US resolution that gave implicit approval for the occupation of North Korea, recommending that

> (a) All appropriate steps be taken to ensure conditions of stability throughout Korea; and
> (b) All constituent acts be taken, including the holding of elections, under the auspices of the United Nations, for the establishment of a unified, independent and democratic Korea.

On October 9, the Joint Chiefs qualified their earlier caution concerning threatened Soviet or Chinese intervention, ordering MacArthur to continue an advance "so long as success seems probable."

On October 12, the CIA reported that "... despite statements by Chou En-Lai, troop movements to Manchuria, and propaganda charges of atrocities and border violations, there are no convincing indications of an actual Chinese Communist intention to resort to full-scale intervention in Korea."

During this same period, both the North Korean and Chinese governments had renewed their solicitation of the Soviet Union to become more active in its support of the war. The day the first UN troops crossed the border, Stalin sent a telegram to Mao Zedong and Zhou En-Lai, requesting they send five to six divisions into Korea, in which he advised: "The Chinese soldiers may be considered as volunteers and of course will be commanded by the Chinese." Mao responded that such plans had already been made. At the same time, Stalin was clear that Soviet forces would not intervene directly, though he would provide "unofficial" air support. As a result, during the course of October, Soviet aviation units were transferred to airfields in Manchuria across the Yalu border with North Korea. They were to undertake defensive action against UN aircraft over North Korea, but would carry North Korean markings; the pilots would wear North Korean uniforms and would not use the Russian language over the radio.

On October 8, the day it was reported that MacArthur had received UN authorization to cross the border and subdue North Korea, Mao Zedong redesignated Long March veteran Marshal Peng Dehuai's PLA North East Frontier Force in Manchuria as the Chinese People's Volunteer Army and ordered the marshal to commence sending his divisions across the Yalu.

When Ambassador Pannikar heard the news of the UN decision, he wrote in his diary:

> So America has knowingly elected for war, with Britain following. It is indeed a tragic decision, for the Americans and British are well aware that a military settlement of the Korean issue will be resisted by the Chinese and that the armies now concentrated on the Yalu will intervene decisively in the fight. Probably that is what the Americans, at least some of them, want. They probably feel that this is an opportunity to have a showdown with China. In any case, MacArthur's dream has come true. I only hope that it does not turn out to be a nightmare.

On October 15, President Truman met his Far East commander for the first time, when he and General MacArthur arrived on Wake Island for a conference on the status of the war. Despite the fact that MacArthur treated the President with disdain, the two agreed that there was no real threat of Chinese intervention and their mutual dislike was hidden when they publicly pronounced their agreement to move on into North Korea and end the war with the unification of the peninsula. MacArthur famously promised the reporters covering the meeting that "the war in Korea will be over by Christmas."

What neither Truman nor MacArthur knew was that at the same time they made their statement, Mao had agreed to send a total of 200,000 troops – all combat veterans of the Chinese Civil War – into Korea. The troops would begin crossing the Yalu on October 18. Once in Korea, they would "disappear" so far as the Americans were concerned, because they did not move like a Western army. They were afoot, with each man carrying a 70lb pack that included his weapons and ammunition and food.

Between October 18 and 25, 130,000 men entered eastern North Korea, moving into the Taebaek Mountains near what UN maps called the Chosin Reservoir, its Japanese name, and the Chinese called the Chanjin Reservoir, its Korean name. At the same time, a force of 150,000 entered western North Korea north of the Chongchon River above Pyongyang. MacArthur's intelligence staff failed to discover even the smallest evidence of this movement since the Chinese forces utilized excellent fieldcraft and camouflage, combined with a lack of radio communication, mechanized activity, or the creation of supply dumps. Chinese units were able to move 15 miles at night without a single cigarette smoked and left behind, with the troops burrowing into caves during daylight hours. Americans in the meantime persuaded themselves the war was all but over. It was nearly a requirement to be taken seriously in Washington and Tokyo that one "knew" the Chinese were not coming. Any report to the contrary arriving in Tokyo from the front lines was immediately dismissed.

With the decision made to invade North Korea, the 1st Marine and Army 7th Infantry divisions of X Corps – which had spearheaded the Inchon invasion – were withdrawn from combat and sent aboard ship to invade Wonsan on the east coast, from where they would move north to the Yalu, while Eighth Army would move up through western North Korea after taking the North Korean capital at Pyongyang.

The Wonsan invasion was delayed when it was discovered that the North Koreans had mined the harbor, using the thousands of sea mines provided by the Soviets. Several weeks' delay ensued while the Navy's inadequate minesweeping force cleared enough of the harbor to allow the Marines to come ashore on October 26, a week later than originally scheduled, after the ROK 3rd Division had taken Wonsan from the land, and four days after Bob Hope's USO troupe entertained the men of MAG-33, who had already brought their Corsairs and Tigercats to Kunsan. VMF-214 and 323 remained aboard *Sicily* and *Badoeng Strait* respectively, which had moved to the Sea of Japan and now stood offshore to provide support for the northward push. The F4U-5N Corsairs of VMF-513 and the F7F-3N Tigercats of VMF(N)-542 provided a night attack capability in company with the VC-3 detachments of F4U-5N Corsairs and VC-35 night attack Skyraiders aboard Task Force 77's carriers.

For those aboard the four carriers of Task Force 77, October was a strange month. The fleet was reinforced on October 15 when USS *Leyte* (CV-32) arrived on station to join *Philippine Sea*, *Valley Forge* and *Boxer*.

An Atlantic Fleet carrier, *Leyte* had been in the Mediterranean when the war broke out. On August 13, she had taken part in a demonstration of airpower over Beirut, Lebanon, in support of the Lebanese government against communist pressure. Making a fast transatlantic passage, *Leyte* arrived at Norfolk on August 24. Following two weeks of resupply and re-equipment, she left port on September 6 for the Far East, via the Panama Canal and Hawaii, and arrived in Sasebo on October 8. Air Group 3 consisted of VF-31 flying F9F-2 Panthers, VF-32 and 33 equipped with F4U-4 Corsairs, and VA-34 operating AD-3 Skyraiders. No one aboard ship could imagine as she departed Sasebo on October 15 that they would not touch land again until January 19, 1951, by which time they would set the Navy record for continuous time-on-station of 92 days, while flying 3,933 sorties in support of UN forces during the darkest days of the war.

By the middle of October, "victory fever" was rampant in the American armed forces. MacArthur's promise that "the boys will be home by Christmas" was repeated as a mantra. In Seoul, Syngman Rhee was proclaimed president of unified Korea on October 21, while units of Eighth Army actually removed combat equipment from units and prepared it for return to Japan, and troopers of the First Cavalry Division were told they would need to prepare their best uniforms for the coming victory parade in Tokyo. At Rhee's inauguration, MacArthur asked the assembled press, "Where is Kim Buck Tooth?" Five days later, the first ROK unit arrived at the Yalu border.

There were Americans who saw things more clearly. Pilot Mike Lynch, who served as staff pilot to both generals Walker and Ridgway from 1950 to 1952 and saw nearly all the high-ranking American military leaders close up, recalled in later years the greatest myth of the war was:

> MacArthur's claimed knowledge of the Oriental mind. We may have known the rich businessman in Manila, and the cowardly and corrupt Chinese leaders in Chiang's army, and the condescending Japanese in Tokyo. But we knew nothing about the battle-hardened North Koreans or the dedicated Chinese who had whipped Chiang. It was a classic failure to apply the most basic tenet for military commanders: know your enemy.

On October 19, the same day Eighth Army took Pyongyang, planners at Seventh Fleet headquarters issued Operation Plan 114-50, which listed naval support missions to be flown during the pacification of North Korea; it was complete with an annex regarding the return of forces to the United States. 1st Marine Division commander General O. P. Smith had been given plans for the division's redeployment before he arrived at Wonsan.

Sortie rates aboard the carriers of Task Force 77 were reduced as pilots found fewer targets. Four days before the Marines went ashore, *Philippine Sea* and *Boxer* left station to return to Yokosuka on October 22. *Boxer* was to depart for the United States by October 26 for her long-overdue overhaul; when she returned to Sasebo following Inchon, her number four prop had been removed and she was operating on only three of her four main engines. *Valley Forge* retired to Sasebo on October 30 with her return to the United States scheduled for November 26. *Leyte* expected to follow "Happy Valley" by late November, following the arrival of the UN armies on the Yalu.

VMF-214 went ashore at Kunsan with the rest of MAG-33 when *Sicily* returned to Guam to take up antisubmarine warfare training again; VMF-323 remained aboard *Badoeng Strait* while she prepared to leave for Japan and return to San Diego in mid November. HMS *Theseus*, which had replaced *Triumph* after Inchon, had run out of worthwhile targets on the west coast and departed at the same time for Sasebo, then on to Hong Kong for a deserved liberty before she turned to support anti-guerrilla operations in Malaya.

While the leaders in both Tokyo and Washington downplayed any possibility of Chinese intervention in Korea, the pilots of Task Force 77 and their Marine counterparts ashore saw numerous signs that something was happening. Lieutenant (jg) Thomas J. Hudner, Jr., of *Leyte*'s VF-32 "Swordsmen," recalled sighting indications of mass crossings of the frozen Yalu in late October as signs of increased enemy activity suddenly became apparent.

Pilots of VMF(N)-513 and VMF(AW)-542 could use their AN/APS-19 radars to map the terrain below for nearly 80 miles ahead. Tigercat pilot 1st Lt W. P. Garton from VMF(AW)-542 saw the Chinese buildup on his first Yalu night mission.

> For one hour, I orbited the Korean side of the river and counted the trucks coming across the bridge between Antung and Sinuiju. The trucks left brightly lit Antung with their lights on; halfway across the

> bridge, they would switch to black-out lights and grope their way through dimly lit Sinuiju. The traffic appeared to be almost entirely one-way, and in the hour I observed them, I counted over 150 trucks crossing the bridge.

A week later, Garton reported counting over 200 trucks that crossed in the hour he watched them.

Despite the many reports from pilots like Hudner and Garton, MacArthur's intelligence chief, Major General Charles Willoughby, continued to maintain that any intervention by Chinese forces would be limited in its scope and operations, and chided lower commanders for forwarding such reports to him.

At the end of October, Air Force reconnaissance flights along the Yalu first spotted large numbers of silver, swept-wing fighter planes at Antung airfield on the Manchurian side of the river, and fliers reported coming under fire from antiaircraft batteries located across the river in Manchuria.

The silver jets marked the arrival of Soviet units from both Frontal Aviation and the PVO-Strany air defense force of the Red Air Force. The 64th Fighter Aviation Division (IAD) was the first unit to deploy to Manchuria. The 64th IAD included the 29th Fighter Regiment (IAP) of Frontal Aviation and 151st Fighter IAP of the PVO-Strany Air Defense Command. These units were each composed of approximately 50 aircraft, the same size as a US Air Force fighter wing. While the overall force was small, it was the most technologically advanced air force in the region, equipped with the brand-new MiG-15, a second-generation jet fighter with swept wings and superior performance to the first-generation F-80 Shooting Star and F9F-2 Panther. USAF and Navy pilots would only be able to hold their own due to superior training and experience when they first encountered the Soviet fighters in November.

CHAPTER 7

A WHOLE NEW WAR

As October ended, it was clear to those in Korea – if not to their superiors in Tokyo and Washington – that there was "something new afoot." Several ROK units produced Chinese prisoners who were not reticent when it came to informing their captors regarding their unit's size and future plans. Unfortunately, this very openness on the part of the prisoners – the result of their being members of a revolutionary organization in which openness of information was the standard practice – worked against acceptance of the information provided. General Willoughby's intelligence office claimed these were obviously lies and exaggerations by lower-ranking personnel. US Army officers argued with superiors following "the Tokyo line" regarding what they were seeing in North Korea with their own eyes, while the Marines opted to believe what they had discovered and ignore what they heard from Tokyo about "stragglers."

The air war suddenly changed. F-80 pilots of the 51st Fighter Interceptor Wing reported on October 31 that they had seen "silver, arrow-shaped jets" in flight over Antung, which were tentatively identified as MiG-15s. On November 1, 15 F-51D Mustangs from the 8th Fighter-Bomber Wing attacking the Yalu bridges were intercepted as they came off the target by eight MiG-15s of the 29th IAP. The pilots of this specially organized unit were mostly Great Patriotic War (World War II) aces. The Mustang flown by 1st Lt Aaron Abercrombie became the first US victim of the new arrivals. A few hours later, history's first jet-versus-jet combat happened when a flight of F-80Cs from the 51st Fighter Interceptor Wing were hit by three MiG-15s that dived through their formation. The MiG's heavy armament of one 37mm and two 23mm cannon was put to good use by Senior Lieutenant Semyon Fyodorovich Jominich, who hit and exploded the Shooting Star flown by 1st Lt Frank Van Sickle. These two losses were officially credited by the USAF to North Korean antiaircraft fire until the end of the Cold War, when newly available Russian records revealed the truth.

The night of November 1, the ROK's 6th Division on the Yalu was hit hard and forced to withdraw its position. At the same time, three battalions of the 1st Cavalry Division's 8th Regiment were hit at Unsan by three divisions of the People's Volunteer Army. The cavalrymen were surrounded and eventually had to abandon their equipment, while the survivors made their way back through the Chinese in small units and several hundred became prisoners of war. The fighting continued until November 5 as the Americans were forced back south of the Chongchon River, where the Chinese were forced to break off combat due to shortages of food and ammunition. What the Chinese called the First Phase Campaign had demonstrated clearly that this was a Chinese army that could indeed stand against a Western army.

While MacArthur publicly continued to discount any likelihood of serious Chinese intervention in Korea, his headquarters directed the Navy to increase air efforts over the northern peninsula to break up enemy formations. The November 4 order found only *Leyte* in the Sea of Japan with stormy skies, while *Philippine Sea* and *Valley Forge* were in Yokosuka. *Valley Forge*'s scheduled return to the US was canceled. The morning of November 5 "Happy Valley" and the battleship *Missouri* with their accompanying escorts departed Yokosuka. Despite encountering 50-knot winds as they rounded Kyushu and headed into Tsushima Strait, they entered the Sea of Japan and rejoined *Leyte* on November 6. Task Force 77 commander Admiral Ewen aboard *Philippine Sea* resumed formal command of the force when the carrier joined *Valley Forge* and *Leyte* on November 9.

By the time *Philippine Sea* arrived on station, the Marines had also discovered how tough the new opponent was. The 7th Regiment had moved up from Hungnam, headed to the Chosin Reservoir from where the Marines were scheduled to commence their offensive to clear eastern North Korea, when two Chinese divisions hit the Marines at Sudong on the night of November 7. The battle lasted through the night and the early morning of November 8. Unlike the Army, the Marines did not break under the assault, but the survivors freely admitted they had hung on by their fingernails. The new enemy was a dangerous force indeed.

Faced with the increasing likelihood of opposition by enemy jets with superior performance to his Shooting Stars, Far East Air Forces commander General George E. Stratemeyer made a formal request on November 7 that his fighters be reinforced with higher-performance aircraft. The next day, Air Force headquarters in the Pentagon ordered the deployment of the 4th Fighter Interceptor Wing's North American F-86A Sabres and the 27th Fighter Escort Wing's Republic F-84E Thunderjets. The Sabre was the only operational swept-wing fighter in the world other than the MiG-15, while the first-generation Thunderjet had higher performance than the F-80. The leadership of both units included combat veterans of World War II who had elected to remain in the Air Force after the war though most of the pilots in both units had never seen action. The aircraft were flown to San Diego, where they were cocooned for overseas shipment. On November 14, the F-84s were loaded aboard USS *Bataan* (CVL-29). The F-86s of the 335th and 336th squadrons went aboard USS *Bairoko* (CVE-115) on November 28, while the Sabres of the 334th Squadron were loaded aboard four high speed tankers at NAS Alameda in the San Francisco Bay. The Thunderjets arrived in Japan by the end of November and were declared operational on December 6, the day the Sabres arrived in Japan. Lead elements of the two wings would not deploy to Korea until mid-December.

While Task Force 77's carriers put up a maximum effort to strike targets in eastern North Korea, the Air Force was ordered to commence a similar maximum effort in the western half of North Korea. The November 5 order instructed commanders to fly their crews "to exhaustion if necessary" in a planned two-week effort "to destroy every means of communication and every installation, factory, city and village" below the Yalu. Only the hydroelectric complexes in North Korea, which supplied power to Manchuria and were considered necessary for UN forces once they occupied the country, were excepted. The order prohibiting incendiary attacks on inhabited areas, which had been in effect since the outbreak of the war, was rescinded. Plans were made to send B-29s to bomb the Yalu bridges.

This reversal of previous plans and the maximum air effort caused a flurry of activity in Washington. The Joint Chiefs responded with an order to suspend attacks within five miles of the border and asked for an explanation of the decision to mount the air offensive. On November 6, MacArthur replied in very different terms from his November 4 message in which he had discounted any likelihood of major Chinese intervention. On November 8, the general reported "men and material in large force" pouring across the Yalu bridges that threatened "the ultimate destruction of the forces" he commanded. The message stated that a cancellation of the B-29 mission against the bridges "might well result in a calamity of major proportions." The message ended with the statement that the air strikes were the sole means of preventing enemy reinforcement by destroying the bridges and "all installations in the north area supporting the enemy advance."

The same day that MacArthur reported the Chinese "pouring" into Korea, the CIA estimated there were 30–40,000 Chinese already in North Korea, with 700,000 in Manchuria poised to enter Korea. However, leaders in Washington continued to believe that the communist world acted only from a prearranged plan directed by the Soviet Union. Thus the Chinese could not operate independently of a Soviet leadership now unwilling to see the war extended after the defeat of its North Korean proxy. The next day, CIA director Walter Bedell Smith urged the National Security Council to give MacArthur an even freer hand in North Korea, arguing that "the Kremlin's basic decision for or against war would hardly be influenced by this local provocation in this area."

On November 9, MacArthur regained his equilibrium following the end of the Battle of Unsan and the successful Marine stand at Sudong, both of which ended with Chinese withdrawals from the battlefield. He further muddied the Washington waters with an additional message stating that his belief the Chinese were not intervening on a major scale had now been confirmed. He emphasized the importance of communist air operations from Manchuria and requested instructions on dealing with this threat. In reply, the Joint Chiefs authorized strikes against the Korean ends of the bridges, and allowed additional strikes against other targets up to the river's southern bank; significantly, the chiefs reemphasized their order that UN forces avoid any violation of Manchurian territory or airspace.

Secretary of State Dean Acheson lamented that control of the war had passed to the Chinese, then to MacArthur, and it now appeared the administration "had no influence at all on the former and marginal influence on the latter."

As preparations for the "Home by Christmas" final offensive in North Korea proceeded, the carriers of Task Force 77 in the Sea of Japan were forced to maneuver to avoid a series of winter snow storms, which reduced flight operations. The Siberian storms the carriers confronted were a harbinger of what was coming. Flight decks were cleared of snow by sweeping with brooms, followed by blasts from jet engines while launching strikes against northeastern North Korea in an area of operations east of 126° 40'E and south of a line five miles below the Yalu border.

The 1st Marine Air Wing's shore-based squadrons had moved up to Yonpo outside the port of Hamhung at the end of October to be in position to provide air support to the 1st Marine Division in the planned move to the Yalu through the region of the Chosin Reservoir. The cold snap made aircraft operations ashore as challenging as they were aboard the carriers, though different. Maintenance of aircraft in the open in extreme cold conditions was particularly difficult. If a man placed a bare hand against a cold aluminum airframe, his skin might stick to the metal surface when he tried to pull his hand away. Engines had to be started several times during the night to prevent the oil congealing in the crankcases. In the morning, the bottoms of tires would be frozen to the ground. The rubber would maintain that configuration, with the result that the airplane would "thump" as it taxied to the runway or slide on the ice on the "flat" surface of the tire.

VMF-214 "Black Sheep" ordnance technician Staff Sergeant James Ritter recalled that the wings of the unit's Corsairs had to be folded and unfolded several times a day to keep the rubber attachments from freezing in one shape.

> Previously, we had loaded rockets on the Corsairs while they had their wings folded, the way we did on the carrier, but with the winds we were getting in the field it was too dangerous for a man to be standing on a ladder trying to load a rocket when the wind gusts came. It was harder to load rockets and light bombs with the wings spread, but it was safer for the personnel involved.

VMF-214 crew chief Staff Sergeant Floyd P. Stocks remembered the difficulty encountered with changing engine spark plugs.

> It isn't too hard to remove sparkplugs while wearing gloves, but it's just about impossible to start a plug while wearing gloves because there's not enough clearance around the plug port. To change a sparkplug you have the old plug out and the new plug warm before you start. Wrap a new warm plug in a rag and hurry to the man standing by at the engine. That man pulls off his glove and gets the plug started. Once started he puts on his glove and completes the installation using a plug wrench.

On November 8, ComNavFE (Commander Naval Forces, Far East) informed Admiral Struble that MacArthur's headquarters now planned to destroy the first overwater span on the Korean side of all the Yalu bridges and needed the help of Navy dive bombing. FEAF Bomber Command B-29s had made attacks on the downstream bridges located at Sinuiju, Chongsongjin and the lower end of the Suiho Reservoir between November 4 and 7, and reported heavy southbound vehicle traffic. Thus, the Navy was instructed that the target was limited to the first overwater span of each bridge; the hydroelectric plants and their associated facilities were not to be hit. On November 10, Task Force 77 was ordered to destroy the seven major bridges from Sinuiju eastward, through Chongsongjin, Namsan-ni, and Manpojin to Hyesanjin.

The bombing restrictions made these extremely difficult targets. The attackers could only approach from up or down river, across the narrow dimension of the bridge rather than along the length. The enemy could predetermine the strike tracks and maximize antiaircraft gun locations on the Manchurian side, which were not subject to attack. The Navy was given the job after the B-29s had shown how difficult it was for horizontal bombers to hit a single span, since they could not get an effective aiming run owing to the drop intervals of their bombs during the first Yalu bridge missions. The Skyraiders would have to execute difficult dive-bombing attacks, on missions that involved flying over distances up to 220 miles from the fleet to hit the westernmost bridges, flying over high mountains in winter weather, and requiring accurate navigation.

The first Navy mission was flown on November 9 against the bridges at Sinuiju and Chongsongjin. Between November 9 and 12, strikes were flown against bridges at Namsan-ni and Manpojin. Results were not good, due to the aforementioned targeting difficulties. On November 13 and 14, Skyraiders went after the bridges at Hyesanjin, while B-29s attacked the downstream bridges. Between November 15 and 20, the Skyraiders flew four return visits to bridges previously attacked, while seven more B-29 missions were mounted during the last ten days of November.

The flak over the bridges was dangerous, and pilots were frustrated by the fact the majority of the antiaircraft gun positions were across the river in untouchable Manchuria. On November 11, *Leyte* flew 102 sorties against the bridges at Chongjin and Namsan-ni. Lieutenant (jg) R. R. Batson of *Leyte*'s VA-34 was hit while over Namsan-ni and set afire as he dive-bombed the bridge target. He managed to pull out of the dive and crashlanded the AD-3 Skyraider, after which he was seen to get out of the cockpit and walk away from the aircraft. It was too late in the day to send a helicopter to look for him and a RESCAP was flown on November 12 without result. Batson was one of the most popular pilots in the squadron, and over the next two days, pilots conducted their own searches for him as they returned from their strikes. The final search was made on November 15. Sadly, Batson was never found and is still listed as Missing In Action. The snowy North Korean mountains in winter were no place for a man to survive long out in the open.

The Skyraiders attacked the bridges in formations of two or three four-plane divisions, with the airplanes carrying a 2,000lb bomb on the centerline rack and one 1,000lb bomb on the inner pylon of each wing. Escort was provided by Corsairs armed with HVARs to attack any flak positions on the North Korean side of the river, while two divisions of Panthers provided cover in case the newly arrived MiG-15s made an appearance.

Launching from the ships located in the Korean Gulf, the Skyraiders climbed to cross the Taebek Mountains at 10,000 feet while the Corsairs climbed to 13,000 feet. The faster Panthers would catch up to the formation around 60 miles from the target. The Corsairs attacked first to suppress flak, while the Skyraiders executed precision dive-bombing attacks from altitude as the Panthers stayed high and watched for MiGs from Antung.

Task Force 77 set a record for the number of flight operations flown in difficult weather conditions as winter quickly arrived in Korea.

After refueling on November 13, *Leyte*'s Air Group 3 flew 130 sorties in the next two days. VA-34's Skyraiders carried so much ordnance on each mission the carrier was forced to pull off the line on November 16 to refuel and rearm. When she returned to the bomb line, 145 sorties were flown over November 17 and 18. *Leyte*'s pace was average for the air groups operating in Task Force 77 during the strikes against the Yalu bridges.

Harlan Foote, commander of *Valley Forge*'s VC-35 Skyraider night attack detachment, later recalled:

> At that time, we were operating in heavy seas in winter conditions. There were gale-force winds often, and it frequently happened that the ship would take green seas over the bow, which would freeze on the flight deck. Takeoffs were adventurous to say the least, and landing could be a nightmare with the deck pitching through 20–30 feet at times, and rolling 10–15 degrees constantly.

On November 14, a VF-112 F9F-2 Panther crashed through all three of *Philippine Sea*'s Davis landing barriers when a wildly pitching deck caused a hard landing in which the Panther's tailhook was broken off. The airplane crashed into parked aircraft loaded with bombs and rockets and caught fire. There was fear the fire might become uncontrollable, as 11 parked airplanes were set afire by the spreading flames. Fortunately, the carrier's crew had just installed an updated foam fire-control system with high-capacity pumps at each generator point in the system. Using four generators, sufficient foam was produced to put the fire out in six minutes and extinguished completely in nine. The monthly report recorded that "this system is considered a vast improvement over the system originally installed in this vessel."

The MiG threat continued to grow. During the B-29 strike against Sinuiju on November 8, 1st Lt Russell J. Brown, flying an F-80C of the 16th Fighter Interceptor Squadron of the 51st Fighter Interceptor Wing, was one of a flight of four Shooting Star pilots in a four-flight mission to attack the North Korean airfield in support of the bombers. Brown was assigned as wingman to his element leader, 16th FIS commander Major Evans G. Stephens. After flying cover for the other three flights as they strafed the field, Stephens would lead his flight down on a "clean up" attack.

Smith recalled that when they finally executed their strafing run, the defending flak was heavy, and that most was coming from the Manchurian side. "We could have got out and walked on it." After Brown and Major Stephens completed their run, they climbed to cover 1st lieutenants Ralph N. Giel and Richard D. Escola on their attack. Major Stephens quickly spotted 8–12 MiG-15s approaching from the south and above, on the Korean side of the river, and ordered Giel and Escola to break off and join up.

The four F-80s rejoined at 20,000 feet, at which time Major Stephens saw two MiG-15s pull out of a dive and head toward the Antung complex at their same altitude. As Stephens banked sharp left to pursue them, Brown had not spotted them. "I was looking around like mad and flying formation at the same time." As they completed their turn, Brown saw the two MiGs; the leader broke directly in front of Stephens as the wingman turned in front of Brown.

The wingman climbed to the left, but Brown stayed tight inside the turn. Three of his six .50-caliber guns had jammed on the strafing run, but he managed to fire four short bursts that missed. The enemy pilot then winged over into a dive and Brown went after him. As the two fighters hurtled straight down, Brown closed to within 1,000 feet of the MiG and fired one long burst, followed by three short bursts. Brown saw what he thought was the MiG catch fire near the engine. "It was now or never, I squeezed the trigger and held it down." Brown later reported that the MiG caught fire only 2,000ft above the hills below. As the jet exploded, Brown – his Shooting Star buffeting at more than 600mph – reduced the throttle and pulled back hard on the stick. G-force streamers spread from the wing tips as the F-80C managed to pull out of the wild dive a hundred feet above the ground and head back for altitude.

Brown's claim was credited as the first jet-vs-jet victory. In fact, the MiGs that had attacked his flight were part of a group from the 28th, 72nd, and 139th GvIAPs tasked with intercepting the bombers. Launched too late to hit the B-29s before they had dropped their loads, the Soviet pilots had chosen to go after the fighter-bombers engaged in attacking antiaircraft positions. Brown's opponent was Lt Kharitonov, who in fact was not splattered across the Korean countryside. He had dropped his two underwing tanks in the dive. In the light haze at the lower altitude, Brown had mistaken the falling drop tanks for pieces from the enemy fighter. He then identified the plumes of burning kerosene from the falling tanks as the MiG catching fire, an illusion in the haze that reinforced his belief he had mortally wounded his adversary. However, the MiG was constructed so strongly that the weight of fire of one .50-caliber machine gun could have been fatal only if there been a "golden BB" hit on something vital. As Brown pulled up, Kharitonov pulled out so low his exhaust rippled the trees immediately below. He stayed low as he streaked across the Yalu and was dropping onto the main runway at Antung while Brown was climbing to rejoin the others and reporting his success. Brown's "victory" remains in official USAF history as the first jet-vs-jet kill. He would remain in theater until the summer of 1951, but this was his only score. That he had even gotten close was due to luck, since Kharitonov could have easily outrun Brown's Shooting Star had he spotted the American and applied throttle in time.

It was the Navy's turn to test the Panther against the MiG the next day. VF-111 commander Lt Cdr William T. "Tom" Amen was leading 12 F9F-2 Panthers from VF-111 and VF-112 to escort a strike against the Yalu bridge at Sinuiju. He later reported:

> We could clearly see the big runway at Antung across the river in Manchuria but were too far away to ascertain what type of aircraft were parked along the runway. As the bomb-laden ADs started their dives on the bridge, I radioed the leader to find out if any of them had sighted MiGs. Ten seconds later a voice came on the radio to say there was a fast-moving jet coming up behind our formation. I looked over my shoulder and there it was, a shiny swept-wing aircraft banking toward me from my seven o'clock position. I immediately turned to meet him head-on. The MiG pilot raised his nose and started a steep, almost vertical climb to about 15,000 feet, where he leveled off. Just as he started his climb, my wingman and I got off a burst of 20mm. It was ineffective. We stayed on his tail. If we'd hesitated the MiG pilot would have gained the advantage since he already had a 100-knot speed advantage. If he'd chosen to remain straight and level he could easily have outdistanced us, but every time he turned we closed the gap.
>
> We were firing short bursts as we closed in, and the other two Panthers of our division were firing long bursts as they tried to close in. Evidently that scared the MiG pilot into a dive and I got on his tail. We

> were heading almost straight down and my airspeed hit 500 knots as I was firing all the way. Suddenly my Panther started to buffet as the nose was trying to tuck under and I hit my dive brakes and stopped firing. The MiG's dive angle had increased to about 40 degrees. As we passed through 3,000 feet the MiG flipped over on its back. I thought the pilot was either crazy or had one of the best fighters ever built! A second later I could see mountains coming up fast. Then I saw trees and rocks. Pulling hard, I bottomed out with no more than 200 feet to spare. As I turned the nose up, my wingman called to report I had gotten the MiG, which had gone straight in and exploded, starting a forest fire.

Following the end of the Cold War, Amen's opponent was identified as Captain Mijael Grachev of the 29th IAP. Since his victory was confirmed by the Russians, Amen is actually the first American pilot to shoot down a MiG-15.

That afternoon, Lt Cdr William Lamb and Lt Robert Parker from *Valley Forge*'s VF-52 engaged eight MiGs just south of the Yalu at 30,000 feet and shared one they chased from high altitude in a high-speed dive, leaving it smoking as it crossed the Yalu and curved toward Manchuria before suddenly exploding over the water, with bits of the fighter fluttering down on the Manchurian hills.

The next day, Amen ran into more MiGs, when four were engaged by his division in a ten-minute fight that saw him damage a MiG. Wingman Ensign Allen "Boot" Hill recalled the fight:

> The weather was clear and cold and you could see forever. The skipper's flight was assigned high CAP, and from 28,000 feet up to 36,000, you could see the MiGs lining up, taking off and climbing on their side of the border to altitude, then turning south towards us and the Corsairs and Skyraiders below us. The MiGs wanted to get within firing range of the prop jobs, and it was our duty to prevent them. The F9F-2 was the best fighter we had in Korea at the time, but with its straight wing we couldn't out-dive or out-climb the MiG. However, if it stayed around long enough we could easily out-turn it.
>
> We engaged four of them over the next ten minutes, and afterwards my gun camera film showed several HEI hits on the starboard side of a MiG's fuselage. When the film was developed on the carrier later

> that day, any of it containing MiG images was forwarded immediately to the Pentagon.

Around this time, Panthers began experiencing a problem with gun-stoppages. VF-31's Ensign Jack Cogdell recalled:

> When the weather turned cold, a disconcerting problem became apparent. As we approached the target area, we switched on and charged the guns. This placed the first round in the chamber. When we pulled the trigger, all four guns fired, but they only fired that first round. No amount of switching the guns on and off or repeatedly pulling the trigger produced more firing. Effectively, we had four single-shot cannon, which was bad for a front-line Navy fighter. This problem baffled the ordnance crew, and it persisted for some time. After several days a Marine ordnance expert came over to *Leyte* and the solution was found. It was determined that the lubricating oil being used was freezing at altitude. His idea was to remove all the lubricants and fire the guns "dry" and accept the added wear. It worked.

From November 11 on, nearly every Navy mission against the bridges was intercepted by MiGs. On November 18, Ensign Frederick Weber from *Leyte* scored the last Navy MiG kill until Lt Royce Williams engaged Red Air Force MiG-15s from Vladivostok two years to the day after Weber's victory. The clashes received wide publicity back home, with headlines like "Navy Jets Win Highest Aerial Fight in History," which was the result of an FEAF spokesman's statement that the November 18 flight had occurred at 32–35,000 feet.

Ensign Hill recalled that VF-112 also got involved with MiGs on November 18, in a fight that left the Panthers so low on fuel they had to divert to Wonsan.

> We all touched down on a beat-up, pockmarked and short runway, and all four of us blew our main tires during rollout. We had to wait for assistance, and while we did all four airplanes were hit repeatedly by rifle fire from a small group of North Koreans holed up on the northern tip of the peninsula.

Despite the American victories, the MiG-15 was obviously technologically superior to both the Shooting Star and the Panther. Luck and the superior pilot training of the Americans was the deciding factor. *Valley Forge*'s action report following Lamb and Parker's victory stated, "… noted with grave concern the reported superior performance of the MiG-15 as opposed to the F9F-2. It is believed that if they had been manned by pilots as aggressive and well trained as ours that [our] own pilot and plane losses would have been great." ComCarDiv 3's endorsement stated: "The F9F had inadequate performance for fully effective defense against MiG-15 type jet fighters." For the rest of the war, the Navy would have to depend on the superior training of pilots, since the first Navy jet fighter with a performance equal to that of the MiG-15, the F9F-6 Cougar, a swept-wing modification of the Panther, would not appear in Korean skies until after the armistice.

While the MiG victories were encouraging, the purpose of the Yalu strikes was to destroy the bridges; unfortunately, even the Skyraiders' dive bombing was spotty, with disappointing results. The Navy pilots did drop the highway bridge at Sinanju and were able to take out spans at Hyesanjin, while the B-29s broke two more. However, the communists demonstrated great vigor and ingenuity in improvising repairs, a capability they would put to use with great success throughout the next three years.

While November wore on, the bridges became less necessary to the enemy as the Yalu ice thickened to the point where even heavy equipment could cross without recourse to bridges. The weather turned progressively worse throughout the month, with frequent snow showers over the Sea of Japan leading to cancellation of air operations, and creating difficulties for aircraft returning from long-distance strikes against the Yalu bridges with minimum fuel aboard.

VF-31's Ensign Jack Cogdell recalled how dangerous the onset of winter made operations over Korea:

> On November 27, my division was scheduled for the afternoon CAP. In the ready room before the mission, there was no discussion of weather, and I decided there was no reason to bother carrying my revolver, a decision I would later regret. After we had been on station for an hour, our controller vectored us back to the task force.
>
> Throughout the mission, we had been flying above a solid cloud cover. When instructed, we began our penetration of the overcast.

> From an altitude of 30,000 feet, we descended through the soup to 20,000 feet and then on down to 10,000 feet – so far, nothing. We expected to reach the bottom around 2,000 feet, but when we passed through 1,000 feet with no clearing we all began to worry! The clouds were so thick I could barely see my section leader, my division leader was almost invisible, and I suddenly realized we were flying through a snowstorm!
>
> Division lead continued to drop at a reduced rate through 500 feet and then finally leveled off at 100 feet. There was still no bottom, but we could just make out the ocean below us – dark gray with ominous white caps. We had no horizontal visibility. I checked my ADF needle and realized we had passed the fleet, which was now behind us.

Cogdell's division finally turned around with radar guidance and returned to the fleet at 100 feet. They again overflew the carrier without spotting it. The leader then decided to try to get to Wonsan. Once they made it to the airfield and landed, they were informed by the Marines that the Chinese were expected to overrun the airfield that night. The leader then decided they would make another attempt to get back to the carrier, despite the fact they were low on fuel and there was no jet fuel available. Cogdell took off with his low fuel warning light on. *Leyte* had moved to a position where the carrier was in clear weather. "Since I was lowest on fuel, I was first to go aboard. If I had been number two or three, I wouldn't have made it. Once down, as I taxied out of the wires, the engine died from fuel starvation."

The enemy would soon demonstrate that even the most pessimistic American estimates of their presence in the mountains was less than half of what was there. What Sir Martin Gilbert later described as "the greatest defeat of a previously-victorious army in recorded history" was only a matter of weeks away.

CHAPTER 8

DISASTER

Ever since the Chinese attack against the 8th Cavalry Regiment at Unsan the first week of November, General Walker and his Eighth Army staff had grown increasingly concerned about future prospects regarding the planned offensive to end the war by fully occupying North Korea. Admiral Turner Joy, Commander Naval Forces Far East, who received direct reports from 1st Marine Division commander General Oliver P. Smith and was well aware of the interrogation reports of the captured Chinese soldiers, began to fear the war would continue through the winter, and by the middle of the month he believed the Chinese had the manpower in North Korea to expel the UN forces from Korea, which could lead to World War III. General Smith had been dubious of a winter campaign from the start; the Marines were the only unit in Korea with individuals in leadership positions who had personal experience of winter in Manchuria and direct knowledge of the fighting ability of the Chinese communist forces. Shortly after Sudong, General Smith had suggested holding the region from Hamhung to Wonsan through the winter to renew the offensive in the spring. Even the ever-optimistic X Corps commander, General Ned Almond, indicated some concern in his discussions with the Marines.

Indeed, there was serious reason for concern. Intelligence estimates by Eighth Army G-2 of Chinese forces in Korea were rising. On November 2 the estimate was 16,500. Twelve divisions had been identified by mid-November and the number rose to 100,000, with total enemy strength, including North Koreans, put at approximately

145,000. That figure stood until November 23, when G-2 stated their maximum estimate of 167,000.

Eighth Army's intelligence section would have been amazed had they been given access to a report written on November 9, the same day MacArthur belittled the likelihood of major Chinese military intervention in his report to the Joint Chiefs. Xie Fang, chief of staff to People's Volunteer Army commander Marshal Peng Dehuai, wrote:

> Our 9th Army Group main forces have successively entered Korea from J'ian and Linjiang to assume eastern front operations. We have over 150,000 men on the eastern front, the enemy over 90,000, giving us a 1.66 advantage over him. We have 250,000 men on the western front, the enemy 130,000, giving us a 1.75 advantage over him. Our forces are superior on the eastern and western fronts.

In Tokyo, optimism had returned with a vengeance. At the November 18 staff conference, MacArthur concluded that the all-out air effort against the Yalu bridges had isolated the battlefield, despite unanimous reports that the bridges had not been neutralized and evidence that the Chinese were now crossing the frozen river. The fact that there had been no further combat with any Chinese units since Unsan and Sudong was taken by intelligence chief Willoughby as proof Mao had only intended a "face saving" action and was not looking for further military confrontation. MacArthur ended the meeting after fixing the date for the commencement of the "Victory Offensive" for November 25.

The Navy and Marines were even more worried when orders came down that Task Force 77 would be required to provide air cover to Army units in western North Korea, despite the distances involved from the carriers' position in the Sea of Japan. *Boxer* had departed in early November to return to the US for her much-needed overhaul. *Valley Forge* departed the task force on November 18, headed for Sasebo and then the United States. *Sicily* retired to Japan the same day, after putting VMF-214 ashore at Yonpo outside Hamhung, where MAG-33's five squadrons were further reinforced by the arrival of the veteran RAAF 77 Squadron, which had been in action with their F-51 fighter-bombers since July. At sea, only *Philippine Sea* and *Leyte* were on station, with orders to continue strikes against the Yalu bridges. *Badoeng Strait* was about to leave, but was ordered to delay departure.

Air power would provide the decisive edge for the outnumbered UN forces, but winter conditions made the effort dangerous for all concerned. Weather was frequently more dangerous to pilots than the enemy. Snowstorms such as that encountered by Ensign Cogswell developed quickly. Pilots could take off in good weather, find poor weather at the target, and worse weather when they returned to the carriers and shore bases. Weather made ordinary operations ashore or afloat difficult. Often, thick ice and snow had to be removed from aircraft and flight decks or cleared from runways. A wing not cleaned of ice completely could result in the airplane failing to remain airborne after takeoff and crashing with a heavy load of explosive ordnance.

For carrier-based pilots, their immersion suits (called "poopy suits" by the fliers) gave them less than 15 minutes for rescue in the event of bailing out or ditching before the freezing water killed them. Bailing out or crashing in the forbidding countryside was an even greater danger since flying gear did not provide protection from the extreme cold, while there was also an enemy in the mountains who could capture or kill a flier. The Marine and Navy night fliers faced the additional problem that the heating systems in F4U-5Ns, F7F-3Ns and AD-3Ns and 4Ns were insufficient to provide adequate heat in the coldest night hours. Tigercat pilot Captain Ray Stewart remembered the heating system "would cook the lower part of your legs while your upper extremities froze."

Ashore, the assignment given to the 1st Marine Division was precarious. The division was ordered on November 25 to strike west 40 miles from the Chosin Reservoir to Mupyong-ni, where they would connect with the ROK II Corps that formed Eighth Army's right flank and thence advance north through Kanggye to the Yalu, with their ultimate goal Hyesanjin at the headwaters of the Yalu. The operation was to commence on November 27, two days after Eighth Army crossed the Chongchon River. No one in Tokyo, where the plans were made and the order issued, appeared concerned that the "road" the Marines would follow was little more than an oxcart path, leading through two narrow valleys in the forbidding Taebaek Mountains where the division would be forced to advance on a company front, strung out for over 50 miles in country perfect for ambush.

MacArthur flew to Pyongyang on November 24 for his first visit to Korea since the inauguration of Syngman Rhee in Seoul on October 21. He oozed confidence to reporters when he met with Eighth Army commander Walker and reviewed the troops of the 1st Cavalry Division as they set out for the Chongchon, whence they would begin the offensive the next morning. The official communique that announced the offensive illustrated the attitude of the supreme commander:

> The United Nations massive compression envelopment in North Korea against the new Red Armies operating there is now approaching its decisive effort. The isolating component of the pincer, our air forces of all types, have for the past three weeks, in a sustained attack of model coordination and effectiveness, successfully interdicted enemy lines of support from the north so that further reinforcement therefrom has been sharply curtailed and essential supplies markedly limited. The eastern sector of the pincer, with noteworthy and effective naval support, has now reached a commanding enveloping position, cutting in two the enemy's geographical potential. This morning the western sector of the pincer moves forward in general assault in an effort to complete the compression and close the vise. If successful, this should for all practical purposes end the war, restore peace and unity to Korea, enable the prompt withdrawal of United Nations military forces, and permit the complete assumption by the Korean people of full sovereignty and international equality. It is that for which we fight.

The supreme commander was back in his Tokyo headquarters by nightfall. In Korea, it was now so cold tank engines were left running throughout the night; when crews manned the tanks to move out the morning of November 25, many found the tracks frozen to the ground, requiring a push by another tank to break loose. The Chongchon River was filled with ice floes.

Eighth Army's offensive began at 0700 hours on November 25. It quickly took on the feel of a walk in the park, as troops experienced no opposition. By the end of the day, leading elements were outrunning their supply lines and advancing at a rate of 16,000 yards per day. Many GIs threw away extra equipment, believing it had no further use. The easy advance ended at 1600 hours.

As they advanced on Hill 219 on the east bank of the Chongchon, B Company, 1st Battalion, 9th Infantry Regiment of the 2nd Division, suddenly came under small-arms fire and grenade attack. The entire 9th

Infantry Regiment was fully engaged by nightfall. At 2200 hours, 2nd Division soldiers throughout the Chongchon Valley were awakened by bugles, whistles, drums and rattles, followed by gunfire as the main attack began. Position after position was overrun by Chinese assault units.

2nd Division had been pushed back two miles by dawn of November 26. On the left, the 25th Division was also under attack. Troops fell back all along the Chongchon front as they found themselves overwhelmed by the surprise attack.

Eighth Army was now in danger of being cut off and surrounded as Chinese troops moved through the surrounding forests and headed south. During the first night's fighting, ROK II Corps had been broken by the assault, which exposed Eighth Army's right flank. The Turkish Brigade and 1st Cavalry Division were ordered to reinforce the threatened IX Corps but were unable to do so. General Walker ordered an immediate retreat, but this was easier ordered than done. Eighth Army's offensive had been stopped in its tracks before the Marine advance was scheduled to begin. By December 2, Eighth Army had suffered 11,000 casualties killed and wounded, including some 4,000 lost by 2nd Division on November 29 when the unit was caught by the Chinese in the pass south of the Chongchon when they attempted to withdraw to Kunu-ri. "The Death Ride to Kunu-ri," as the event was later recalled in division history, left the unit destroyed and routed; it would not return to combat for six months. The US Army now made the longest retreat in its history, an event that would later be called in shame "The Big Bug-out."

Incredible as it sounds, the Marines on the other side of the Taebaek Mountains failed to learn of the disaster enveloping Eighth Army.

On November 27, the Marines at the village of Yudam-ni on the western side of the Chosin Reservoir headed up the road to Mupyong-ni at 0800 hours following three hours of artillery fire on the surrounding hills, led by a single M-26 Pershing tank that had made it up Funchilin Pass to the Taebaek Plateau and on to the reservoir. The advance lasted some 20 minutes and got 100 yards outside the village before Chinese mortars overwhelmed the leading units.

After a day of fighting that saw heavy casualties, the lead units of the 5th Marine Regiment managed to get back to the village. That night, 5th and 7th Marines were hit by three Chinese divisions. At the same time, two other divisions hit the 1st Regiment at Koto-ri at the top of Funchilin Pass, some 20 miles south of Yudam-ni. Fighting that lasted all night found the Marines still holding Yudam-ni at dawn, but it was obvious despite General Almond's orders to maintain the advance that no one was going anywhere. By November 28, a patrol sent out from Koto-ri found Chinese units blocking the MSR at the top of Funchilin Pass. The 1st Marine Division was now completely surrounded by an enemy force that had separated the Marines into three positions, each surrounded, at Yudam-ni, Hagaru-ri and Koto-ri. Generals Walker and Almond were ordered to Tokyo on November 28 to report directly to MacArthur. At the conclusion of the conference, the supreme commander, who had only four days before been confident of complete success, authorized Eighth Army and X Corps to withdraw. His subsequent report to Washington claimed the UN force had met "conditions beyond its control and its strength," and was therefore going over to the defensive, and concluded that "we face an entirely new war."

The Army, Navy and Marine Corps now faced one of the greatest crises in their histories.

Unlike the situation at the outset of the war, there was little prospect of reinforcement, since the limited forces available had already been committed. The majority of the Pacific Fleet was now in the region, while the Army had a single division uncommitted in the US. Again, as had happened five months earlier, the intelligence had been there to make a successful prediction of enemy behavior, one that would not have left UN forces so badly exposed, and once again the same people who had failed before repeated that failure.

For Task Force 77, the Chinese attack in the Chosin Reservoir was the starting bell for a month of operations that would see nearly every previous operational record knocked aside.

The Navy gathered what reinforcements were possible. *Sicily* had just arrived in Sasebo from Guam, where she had taken her previous antisubmarine squadron aboard for return to that assignment; the Grumman AF-1S and AF-1W Guardians went ashore again and the little carrier soon departed for the Sea of Japan, where VMF-214 returned aboard. The light carrier USS *Bataan* (CVL-29) had just arrived in Yokosuka with the F-84 Thunderjets of the Air Force's 27th Fighter Escort Wing, and USS *Bairoko* (CVE-115) was expected to arrive with the 4th Fighter Interceptor Wing's F-86 Sabres in a matter of days. Once these jets were off-loaded, *Bataan* joined Task Group 96.8 on December 16. HMS *Theseus* in Hong Kong had been alerted, and the carrier departed the crown colony for return to Korea on December 1.

Valley Forge was halfway across the Pacific at the time the Chinese attacked. She was ordered to proceed at full speed to San Diego and expedite her return with *Boxer*'s Air Group 2.

USS *Princeton* (CV-37) had been reactivated from the mothball fleet following the outbreak of war in Korea and recommissioned on August 28. The crew were largely recalled reservists. They completed training in September and October when the veteran Air Group 19, which had only returned from the Far East just prior to the outbreak of war, came aboard at the end of the month. Among the naval aviators aboard the carrier was Lt Cdr Damon W. Cooper, the air intelligence officer, Lt Doniphan P. "Don" Shelton, senior division leader of the VC-3 Detachment Fox, and VA-195 Skyraider pilot Lt (jg) Ed Jennings.

On November 5, *Princeton* had departed San Diego for Pearl Harbor for advanced training prior to further deployment, with Rear Admiral Ralph A. Ofstie, Commander Carrier Division 5, embarked. After ten days of accelerated training, the carrier sailed from Pearl Harbor for the Western Pacific on November 25. Two days later, Captain William O. Gallery received orders from Commander in Chief, Pacific Fleet (CINCPAC) to proceed at maximum safe speed, and the carrier accelerated to full speed ahead – 30 knots. At the end of the month, orders were received to proceed directly to the Sea of Japan and join Task Force 77.

At the time of the Chinese attack against the Marines, only *Badoeng Strait* was still offshore with VMF-323 aboard. MAG-12's VMF-212 and 312 and VMF(N)-542 were based at Yonpo with MAG-33's VMF-214 and VMF(N)-513. During the fighting between November 27 and December 4, the two squadrons of night fighters were the only air support the Marines could call on quickly for battlefield support during the Chinese night attacks. *Badoeng Strait* was fortunately in an area where the weather was clear enough on December 1 that the "Death Rattlers" could fly 32 sorties in the blowing snow, while the shore-based squadrons also put in a maximum effort to keep their fellow "Mud Marines" covered.

On November 30, *Leyte* and *Philippine Sea* began five days of maximum-effort close air support flight operations. The 5th and 7th regiments of the Marine Division, which had been cut off in Yudam-ni at the reservoir as a result of the Chinese attack on the night of November 27–28, were ordered to break out to Hagaru-ri, the division's central base on the Taebaek Plateau, through Toktong Pass. The breakout would become known as "The Marines' finest hour," with the units arriving in Hagaru-ri on December 4 after 96 hours of continuous combat in deep snow and bitter temperatures of 20 below zero, at a cost of 100 men killed or wounded for each of Toktong Pass's 11 miles.

Rear Admiral Ewen, Commander Carrier Division 1 aboard *Philippine Sea*, was the officer in tactical control as Commander Task Force 77. Air Group 11 commenced all-out operations on November 30, with the highest sortie rate the ship had maintained since arrival in Korea back in August.

Leyte opened her effort on November 30, flying 90 sorties despite difficult sea and air conditions, with snow squalls and low clouds. Bad weather the next day forced pilots to fly on instruments once off the ship up to the reservoir, but still 22 sorties were flown, all of which were forced after their attacks were made to divert first to Wonsan and then to Kimpo outside Seoul due to the horrid weather at sea. Better weather on December 2 allowed 61 sorties. The weather held on December 3 and the Corsairs of VF-32 and 33 were able to drop 36 napalm canisters on two ridges overlooking the road held by Chinese troops, which allowed the Marines to pass successfully.

A morning patrol from *Leyte* spotted a large enemy formation at the northern end of the reservoir on December 4 and attacked it with good success. Later that day, another *Leyte* flight spotted Chinese troops moving south on all trails; this was in fact the Chinese 58th Army which had entered North Korea a week earlier and was attempting to reinforce the exhausted and shot-up units that had been fighting since the 27th. This final day's effort recorded the only loss of the campaign for *Leyte* when Ensign Jesse L. Brown, Jr., was shot down by ground fire. His wingman Lt (jg) Thomas J. Hudner, Jr., crash landed his Corsair near Brown's in an unsuccessful effort to extricate him from his broken airplane. Fortunately for the other low-flying Corsairs and Skyraiders, the only antiaircraft defense the enemy possessed in the area of the reservoir was individual soldiers firing their weapons at overflying airplanes.

Princeton brought with her the first photo-reconnaissance Panthers, four F9F-2Ps of VC-61 Detachment Echo, the Pacific Fleet photo recon squadron. Modified from standard F9F-2s, the guns were removed on the 2P and replaced by two cameras. Previous photo reconnaissance had been performed by the F4U-4P and F4U-5P, but these Corsairs would soon be replaced by the newly modified Panthers until the McDonnell F2H-2P Banshee, which was developed specifically for the photo-reconnaissance mission, arrived in the fleet in late 1952, to be followed by the F9F-5P in early 1953. The jets made photo-recon considerably easier since their vibrationless flight assured sharper photos, while their increased speed meant a pilot could surprise the enemy and be in and out before the defenses had time to adequately respond.

During *Princeton*'s deployment to cover the Chosin withdrawal, Ed Jennings of VA-195 recalled that "we flew two missions a day." The carriers of the task force staggered their operations so that one carrier could withdraw after three days' operations to refuel, rearm and rest the aircrews for a day before returning to the line. Jennings also remembered that UnReps (Underway Replenishment) in the Sea of Japan's wintry wastes could be difficult.

> I was amazed there weren't any collisions during those operations, even with *Princeton* bouncing around like a cork. I didn't envy those guys on the destroyers. They should have gotten submarine pay for all the time they spent underwater! There were some close calls, but we were lucky.

Between December 5 and 11, *Princeton* flew 208 sorties despite poor weather.

Once the Marines were safely in Hagaru-ri, the division prepared further withdrawal through Funchilin Pass to the port of Hungnam. The first units pulled out of Hagaru-ri on December 6 and crossed the Taebaek Plateau to Koto-ri, which was held by the 1st Regiment. Despite the low ground fog throughout the area, the three carriers of Task Force 77, *Badoeng Strait*, and the Marine squadrons at Yonpo were able to put 100 sorties over the force through the day, which forced the Chinese to keep their distance. The lead elements made it into Koto-ri during the morning of December 7 as the tail of the division pulled out of Hagaru-ri. The next day, the lead element set out to descend through Funchilin Pass.

The Chinese had blown a bridge in the pass over a narrow but deep gorge, which could have prevented further withdrawal. Fortunately, six sections of Bailey Bridges had been found in Japan. With no time for test or training, six Air Force C-119s left Itazuke to airdrop the bridge sections. This was accomplished the morning of December 8 at Koto-ri, before the Marines set out. The C-119s successfully dropped the bridge sections, with a loss of two. The four that the Marines recovered were sufficient to span the gorge and the breakout continued.

As they made their way down the pass, the Marines were protected by an innovation in close air support. A Marine R5D (C-54) from VMR-152 had been specially equipped with extra radios, positions for three observers, extra fuel and heating to allow it to operate over the retreating column throughout the day for 12 hours at a time as an airborne command post to coordinate air support. This solved the problem that the radios of the air controllers on the ground were adversely affected by the cold and the mountains that limited their communication range.

The three Task Force 77 carriers continued their operations, while *Badoeng Strait* was joined by *Sicily*. Despite bad weather, *Philippine Sea*, *Princeton*, and *Leyte* put 125 sorties over the Marines as they completed their withdrawal down the Funchilin Pass. The Army's 3rd Division met the Marines at the bottom of the pass at Chinhung-ni on December 10 and the last Marines arrived safely in Hamhung by 2100 hours on December 11. The *New York Herald-Tribune*'s Marguerite Higgins, the only female war correspondent in Korea, reported that during the withdrawal, "an aerial curtain of Marine Corsairs and navy fighters protected the head and tail of the column as it wound over the road."

While the Hamhung-Hungnam Perimeter contracted over the next 12 days with the successive evacuations of the Marine division and the 7th and 3rd infantry divisions, gunfire support from USS *Missouri*, flagship of the Seventh Fleet, and the cruisers and destroyers of Task Force 90 was crucial in keeping the pursuing Chinese forces at bay. The Navy squadrons aboard the three fleet carriers and the three Marine squadrons embarked on *Sicily*, *Badoeng Strait* and *Bataan* attacked the Chinese rear areas to defend the remaining beachhead, while the other Marine squadrons continued to operate from Yonpo.

General MacArthur finally managed to find time to visit the front on December 12 for the first time since his appearance to proclaim the "Victory Offensive" in Pyongyang 17 days earlier. Flying in to Yonpo, he met with General Almond and approved his staff chief's plan for the evacuation of X Corps; he complimented Almond for having "tied down" six to eight Chinese divisions that would otherwise have been free to attack Eighth Army.

During the withdrawal, flight conditions at both Yonpo and aboard the carriers were difficult in the extreme. Pilots were forced to deal with poor charts, minimal navigational aids, and capricious radios. The icy taxiways at Yonpo made taxiing to and from the runway dangerous, and if a plane caught its wing in the snow piled to either side of the runway, it could flop and cartwheel, with a likely explosion when it came to a stop.

Aboard the small CVEs, tumultuous seas and ice-glazed decks made operations dangerous. Over three mornings, *Badoeng Strait*'s flight deck crew had to scrape off ice and snow before aircraft could be launched. Heavy seas and 68-knot winds on December 10 brought flight operations aboard *Sicily* to a stop.

The weather contributed to many operational losses. Three F7F-3N night fighters were lost due to weather between December 7 and 10, and there were many crashes aboard the carriers as pilots tried to land on wildly pitching decks. Amazingly, maintenance crews at Yonpo managed to maintain a 67 percent readiness rate, while the carriers maintained a 90 percent rate.

The Marine aviators of the 1st Marine Air Wing flew more than 1,300 sorties in support of their infantry comrades between December 1 and 11. VMF-323's "Death Rattlers" aboard USS *Badoeng Strait* flew 254, while the "Black Sheep" of VMF-214 flew 122 after their re-embarkation aboard *Sicily* on December 7. VMF-212 aboard *Bataan* flew 105. The remaining 819 sorties were the work of VMF-311 and 312 at Wonsan, and VMF(AW)-513 and 542 at Yonpo. VMF-311, the first Marine squadron flying Panthers, brought their jets to Yonpo on December 10, where they flew air support for four days before flying back to Pusan.

Afterwards, Lt General Leslie E. Brown, a Marine aviation veteran of three wars, recalled:

> The Chosin Reservoir thing was the proudest I had ever been of Marine aviation ... because those guys were just flying around the clock, everything that would start and move. And those ordnance kids out there dragging ass after loading 500lb bombs for 20 hours.

> And aviation's mood and commitment to that division – my God! – it was total. There was nothing that would have kept them off those targets – nothing!

On December 20, 1st Marine Division commander General O. P. Smith wrote to General Field Harris, commander of the 1st Marine Air Wing:

> Without your support our task would have been infinitely more difficult and more costly. During the long reaches of the night and in the snow storms many a Marine prayed for the coming of day or clearing weather when he knew he would again hear the welcome roar of your planes as they dealt out destruction to the enemy. Even the presence of a night heckler was reassuring.
>
> Never in its history has Marine aviation given more convincing proof of its indispensable value to the ground Marines ... A bond of understanding has been established that will never be broken.

While supporting the breakout, *Leyte*'s Air Group 3 expended 1,496 100lb fragmentation bombs, 360 250lb bombs, 63 500lb bombs, six 2,000lb bombs, and 221 napalm canisters, as well as 2,207 HVARs, 24,875 rounds of 20mm and 317,230 rounds of .50-caliber ammunition. During the December 1–11 withdrawal, the five squadrons flew 352 sorties and lost two F4U-4 Corsairs and three AD-3 Skyraiders in combat, with one F9F-2 and one AD-3 lost in operational accidents. One pilot was killed in action while three were listed as MIA, having bailed out of their aircraft after being hit and not picked up.

During the same period, *Philippine Sea*'s Air Group 11 expended 2,606 100lb General Purpose high explosive (GP) bombs, 241 500lb GP bombs, 61 1,000lb GP bombs and six 2,000lb GP bombs, along with 1,615 220lb fragmentation bombs and 715 napalm canisters. A total of 156,904 rounds of 20mm ammunition were expended, but only 226 HVARs. Combat losses included two F4U-4Bs to enemy fire and 18 damaged, while three AD-3 Skyraiders were shot down and 15 damaged. Operational accidents claimed seven F4Us lost and 15 damaged, four Skyraiders lost and 15 damaged, and ten F9Fs lost with 14 damaged, a good indication of the difficulties encountered operating in the difficult winter conditions in the Sea of Japan. Three hundred sorties were flown during the withdrawal, many in bad weather that would have canceled flight operations had there not been an emergency.

As ordered, *Valley Forge* expedited her turnaround in San Diego and arrived in Yokosuka on December 16 with Air Group 2 aboard. This was *Boxer*'s "all prop" air group, which included VF-24, 63 and 64, with 17 F4U-4s in each squadron for a total of 52 Corsairs. VA-65 had 20 AD-2 Skyraiders and two AD-2Q electronic countermeasures aircraft. The VC-35 detachment operated six AD-4N night attack Skyraiders while the VC-3 detachment operated two F4U-5N Corsairs. The VC-11 detachment had three new AD-4W Skyraiders equipped with an AN/APS-20A radar to provide airborne early warning for fleet air defense. The fleet's photo squadron, VC-61, provided a detachment of three F4U-4P photo-recon Corsairs. The "Happy Valley" departed Yokosuka on December 19 and joined Task Force 77 in the Sea of Japan on December 22.

On December 23, *Valley Forge*'s aircraft were launched on 56 close air support sorties in the vicinity of Hamhung. By this time, the North Korean units still operating in Korea were able to deploy antiaircraft weapons that made life more difficult than had the Chinese troops firing as they could against low-flying aircraft. Ensign J. R. Brinkley's F4U-4 was hit by flak north of Hamhung and crashed in flames, the air group's first combat casualty.

The evacuation fleet departed Hamhung with the first Marine units on December 13. Over the next 11 days, the ships would operate one-day shuttle runs to Pusan, where troops and equipment were off-loaded. By the morning of Christmas Eve when the last unit of the 3rd Infantry left Hungnam, 105,000 US and ROK troops, 91,000 Korean refugees, 17,500 vehicles, and 350,000 tons of supplies had been evacuated in 193 shiploads by 109 ships, with some transports making two and even three trips.

On December 24, the last day of the evacuation, VF-31's Ensign Jack Cogsdell flew wing to the squadron CO on a final mission over the harbor.

> We were tasked with staying directly over Hungnam to assist in any way we could. I'd never flown off a carrier in the dark before – Panther pilots rarely conducted flight operations at sea after dark. There was just the faintest hint of dawn to the east as we climbed

> in a westerly direction toward our assigned station. As we arrived overhead, the land and sea below us hadn't yet seen the sunrise. It was an unforgettable sight. In the bay offshore from Hungnam, a number of US warships were positioned broadside to the city. While small craft brought out the last of the evacuees to the transports, the warships were firing into the hills and other areas swarming with advancing Chinese troops.
>
> The battleship *Missouri* was firing full broadsides every few minutes. In the predawn darkness, we could see the flames from her enormous 16-inch guns as they fired, followed seconds later by huge explosions inland as the shells hit the target area. Other ships were firing too, but the sight of *Missouri*'s massive guns dominated the scene. We were witnessing the very end of the evacuation from Hungnam, and it was a very memorable experience.

With the UN forces now departed, Task Force 77's aircraft were directed against the still-advancing Chinese forces, striking roads and bridges and hunting for supply dumps, to slow the inexorable communist advance. Rumors abounded that the Chinese were unstoppable, and that the leadership in Tokyo was contemplating the possibility of evacuating the entire peninsula.

On Christmas Eve, Lt Don Shelton was launched from *Princeton* in his F4U-5N Corsair at 2100 hours. Patrolling at 15,000 feet over Hungnam, Shelton watched the fires set earlier by the last Americans to depart, as they consumed whatever was left of value. At midnight, he radioed Christmas greetings to the air controllers aboard the Task Force 90 flagship, USS *Mount McKinley* (AGC-7), which was still offshore, then he departed and trapped back aboard *Princeton*. The Navy's involvement with the withdrawal from Chosin was complete.

During the first ten days of December, Eighth Army retreated 120 miles out of North Korea, the longest retreat in the US Army's history. The army retreated so fast it outran its Chinese pursuers. This was fortunate, since most units would not have been able to fight successfully if they had made a stand, and thus they were ultimately saved to fight again. The Chinese were only kept from total victory because of inability to keep their units supplied with food and ammunition. Once a Chinese unit expended the ammunition its troops carried, it was forced to retire and await resupply. The Chinese had expected to live off the land, not knowing how unpopulated North Korea was. Starvation faced the army at several places, and troops would often stop fighting once they had broken into an American unit in order to eat the food supplies they came across.

27th Corps regimental commissar Li Xiu remembered:

> We quickly got used to American biscuits and rice, but we never cared for tomato juice. We were particularly glad to find carbines, because rifles were heavy to carry. Without the American sleeping bags and overcoats we captured, I am not sure we could have gone on. Two thirds of our casualties were from the cold that winter, against one third from combat. Our hardest job was how to catch up with the Americans in their trucks. Always, the problem was how to win the battle with less advanced weapons than the enemy.

By the end of December, fears that the Chinese would drive UN forces off the peninsula had subsided, as it became clear the enemy was slowing when he outran his supply lines. On December 23, Eighth Army commander General Walker was killed in an auto accident. General Matthew B. Ridgway, who had commanded the 101st Airborne Division during World War II, was ordered to Korea to assume command. The general's signature hand grenade and battle dressing on his combat harness would become as famous as had General Patton's pearl-handled revolvers.

During the campaign in North Korea, fliers aboard the carriers experienced numerous difficulties associated with the extreme cold of the Korean winter. At the end of December, *Philippine Sea* submitted an after-action report to Commander Naval Forces Far East and Commander Pacific Fleet on "lessons learned." They included:

- Difficulty in visual identification of enemy targets since the Chinese were highly skilled in camouflaging troop positions and other targets. Experience demonstrated that pilots could not identify these targets when flying higher than 1,500 feet above ground level (AGL); however, all aircraft flying below 1,500 feet were well within range of antiaircraft weapons and almost all such flights resulted in damage in varying degrees to the aircraft. One solution was to have one or two planes flown by pilots who were experienced in visual reconnaissance fly at low level (50–500 feet) while the rest of the mission maintained altitude above 2,000 feet AGL until a target was identified to attack.

- Piston engine aircraft needed additional run-up time before the engine was thoroughly warmed for flight. Pilots required extra time to don their immersion suits and to get settled in their cockpits. Where before engines were switched on and pilots manned their aircraft some 20 minutes before takeoff, aviators aboard *Philippine Sea* found that these preparations now needed about 40 minutes before a strike could be launched. Additionally, the cold air and heavy seas forced all maintenance to be performed in the hangar deck, where before in more normal operating temperatures much minor maintenance could be done with the aircraft remaining on the flight deck. It was recommended that in operations during intense cold, the air group be reduced to 75 aircraft from the 85 normally operated, to provide room and flexibility for necessary work.
- Napalm had been found most effective in close air support for ground troops, but it was found that cold weather affected its use. Below a temperature of 60 degrees F, the napalm did not gel with the gasoline unless a catalytic agent was used; as temperatures got colder, pilots reported as many as 50 percent of napalm drops were "duds." *Philippine Sea*'s ordnancemen found a cure involving metal tubing, which would be used to pour gasoline into the canisters being passed through a 55-gallon drum of water, into which steam heat was injected until the water temperature reached 212 degrees F. The temperature of the tubing could then be maintained at around 90 degrees F, which warmed the gasoline sufficiently that it would gel when mixed with the napalm. The result was nearly 100 percent reliability of napalm canisters loaded in such a manner.
- HVAR rockets became unreliable at temperatures below zero for an extended period, which caused the rocket motors to misfire when the weapon was fired by the pilot. The loss of this capability was sorely missed on close air support sorties. The solution was found in rocket motors specifically designed for cold weather operation.

- The 20mm cannon the aircraft used were also affected by the cold weather. At altitude, around 3–5,000 feet, the outside air was anywhere from 20–40 degrees F below zero, and the gun heaters were ineffective with the result that the oil in the weapons and any water vapor would freeze and cause jamming. Again, *Philippine Sea*'s armorers found a solution by removing the single 20mm gun heater and replacing it with two gun heaters for .50-caliber machine guns in each gun bay. More heat was generated and the guns would operate. The armorers also instituted a policy of cleaning the weapons thoroughly to remove excess oil and any accumulated water.

Philippine Sea's report would spread through the fleet and the solutions would go a long way toward meeting the continued problems of cold weather operation during the first months of 1951 and through the rest of the war's winters.

CHAPTER 9

HOLDING THE LINE

Following the withdrawal of UN forces from North Korea by late December 1950, the next six months of the war would determine its fate and the next six decades of history following the signing of the Korean Armistice in July 1953.

As with the UN forces in September and October, Mao and his People's Volunteer Army became infected with "victory disease." The UN forces could have ended the war in September after their arrival on the 38th Parallel, in line with the initial declaration of the UN Security Council, and declared victory. So also could the Chinese in December, since their originally stated reason for intervening in the war was to preserve North Korea from Western imperialism. Had the Chinese stopped at the parallel that December and declared themselves open to a negotiated end of hostilities, the thoroughly cowed Truman administration would have had little choice but to enter such negotiations. Indeed, in the UN General Assembly, India and several of the "non-aligned" nations put forward a proposal to end the war by a return to the *status quo ante* June 25, 1950, and held forth the opportunity for the People's Republic of China to replace the Guomintang's Republic of China in the UN, giving Mao a seat on the Security Council. In Washington, there were those who advocated for such a move, on the grounds it would ultimately lead to a schism between the PRC and the USSR; unfortunately, the believers in "monolithic communism" and Senator McCarthy held sway and such a move was never seriously considered.

After pausing to catch their breath, the Chinese People's Volunteer Army began a fourth offensive on New Year's Eve 1951. It had been expected by the new Eighth Army commander, General Ridgway. Somehow, the nearly defeated Eighth Army was able to hold against the offensive, though Seoul was lost for a second time. Over the course of the next six months, both sides initiated serial offensive operations, seesawing back and forth in the general vicinity of the 38th Parallel. UN forces became substantially stronger as new units were committed to the war. By mid-June, the Chinese forces had shot their bolt and UN commanders in Korea believed it was possible to mount a second invasion of North Korea that would lead to defeat of the communists this time. However, the US government no longer had an appetite for victory in the war, and reacted favorably to a Soviet offer of negotiations in July 1951. This would set off two years of military stalemate as each side sought to find some military advantage that would get the other side to give in.

How this six-month battle in 1951 played out, and its ultimate impact on the conduct of the war, is important to understand if one is to comprehend what the Korean War involved. Aviation, both sea and land-based, was crucial to the UN success, outnumbered as the ground forces were on the front line, but aviation takes a secondary role in this account of how the war turned around and became the stalemate that has existed on the Korean peninsula since.

During December 1950, the war in Korea began to change into something completely different from the "police action" against a minor power that had characterized the outset of the struggle as the UN forces withdrew from North Korea in the face of the Chinese offensive.

The Truman administration had decided in a November 28 cabinet meeting that all-out war with China must be avoided, despite pleas from General Bradley and other top commanders including MacArthur to consider possible use of the atomic bomb. In the November off-year elections, the Democrats had been able to maintain control of the House of Representatives 235–199 and the Senate 54–42, but Republican gains gave the party confidence they could win the White House in 1952. In the wake of the Chinese offensive, Senator Joseph McCarthy called for the dismissal of Defense Secretary Marshall and the impeachment of President Truman. The president must have regretted his decision in June not to accept the Republican offer of a declaration of war, since this now meant the opposition party had no "ownership" of the war and was free to oppose the administration.

American families were receiving letters from their sons in Korea about how useless the war was. In an attempt to publicly emphasize the seriousness of the situation, President Truman declared a state of national emergency on December 16. By early January, the Gallup poll had approval of President Truman's handling of the war dropping to 49 percent; 62 percent of the respondents said getting involved in the Korean War had been a mistake, and 66 percent believed the country should get out of the war. Congressional Republicans were divided between those who called for a wider war and condemned the administration for "tying the hands" of American military commanders, and those who advocated getting out of the war since the administration had failed to achieve its goals. The administration realized that responding affirmatively to public sentiment to withdraw would draw Republican attacks about being "soft on communism," while deciding to widen the war would terrify allies. There was little to do beyond muddle through and hope for improvement.

At the United Nations, India presented a resolution supported by other Asian states calling for a ceasefire-in-place. The administration announced on December 11 that it agreed with and would support the resolution. In reality, the government opposed such an idea, but the announcement was made in the belief the Chinese government would refuse the offer, which they did on December 12 when Zhou En-Lai announced that the resolution was insufficient since it failed to call for removal of all foreign troops from Korea and withdrawal of the Seventh Fleet from the Taiwan Straits.

While all this was going on, the carriers of Task Force 77 continued their effort to slow the Chinese advance to the south. The Chinese were already repairing the rail lines as a top priority. Many of the lines could be defended at vulnerable spots by antiaircraft guns sited on the surrounding mountains, which gave the gunners a clear shot at any aircraft attacking the rail line or bridge below. VF-191's Panthers spent most of their effort escorting the Corsairs and Skyraiders in their attacks, in the expectation that the Soviet-flown MiG-15s at Antung might move south.

F-86 Sabres from the 4th Fighter Interceptor Wing had been sent to Korea to counter the MiG-15s. Seven Sabres from the 336th Fighter Interceptor Squadron arrived at Kimpo (K-14) airfield in South Korea on December 15 and flew their first mission into what would come to be known as “Mig Alley” on December 17 when Major Bruce J. Hinton led four Sabres on a patrol to the Yalu, during which they engaged four MiG-15s and Hinton shot down the fighter flown by Major Yakov Efromenko. The 4th Wing had a full detachment of 16 Sabres at Kimpo by December 18, with pilots from all three squadrons assigned to spread combat experience in the group. The Sabres would only operate in Korea for 18 days, however, before they would be forced to evacuate back to Kyushu when the Chinese offensive that began on New Year’s Eve overwhelmed their base. Thus, the Panthers of Task Force 77 would have to continue as the primary aerial defense of their respective air groups. *Princeton*’s Air Group 19 was among the busiest.

The evacuation of airfields in North Korea had left much ordnance and supplies behind. VF-191 was given the assignment of destroying supplies left behind at Yonpo. On December 21, they attacked the field and destroyed 70 cases of HVARs and numerous 55-gallon drums of aviation gasoline. They returned the next morning and destroyed 60 drums of aviation gas by strafing, following up with a final strike that afternoon that exploded 200 drums.

The newly arrived F9F-2P photo-recon Panthers of VC-61’s Detachment Echo proved their worth on December 24 when a photo mission brought back pictures of a large fuel storage depot in the village of Tongyong-ri. A few hours later, VF-191 Panthers attacked with bombs and rockets and got large secondary explosions. The photo-recon jets proved superior to the photo-recon Corsairs previously used because their speed and relative silence in approach meant they were over the enemy before they had time to cover their tracks.

By mid-December, the People’s Volunteer Army was not the force it had been when the offensive had begun on the Chongchon River. Over the course of the offensive, the PVA had suffered 40 percent casualties, with more to frostbite and starvation than to battle. Additionally, the resupply of PVA divisions was slowed by lack of transport and the heavy winter snows in North Korea. The Fifth Air Force and Task Force 77 continued attacks against rail and road transport behind the front, which added to the delay in resupply. On December 7, Marshal Peng Duhuai reported to Mao that the PVA would need at least 90 days to resupply and rebuild the force to continue the battle, and recommended that the army stop at the 38th Parallel until the spring. He was curtly overruled, though the final order for the Third Phase Campaign limited it in scope to pushing south of the parallel and sowing maximum confusion in the UN forces, with any attempt to push all the way south being made only in the event that UN forces collapsed.

Despite Marshal Peng's recommendation that the PVA halt offensive operations until spring, the Chinese offensive did not stop once UN forces were out of North Korea. Mao Zedong had fallen victim to the same "victory disease" that had overtaken Douglas MacArthur. With his intelligence service providing reports that the UN leadership in Tokyo contemplated complete evacuation of UN forces from Korea, Mao saw the possibility of reuniting Korea. He was supported in this decision by North Korean leader Kim Il-Sung.

On December 31, 1950, the People's Volunteer Army crossed the 38th Parallel, the attack being ordered on that night due to a full moon and the belief American and European forces would be distracted by the New Year's holiday. Newly arrived Eighth Army commander General Matthew B. Ridgway had predicted a Chinese attack on this date for these exact reasons, though UN forces were still surprised.

The assault against the ROK 1st, 2nd, 5th and 6th infantry divisions breached the defensive line at the Imjin River, Hantan River, Gapyeong and Chuncheon. Known to the Chinese as the "Fourth Phase Campaign," initial progress once the South Korean divisions had been pushed aside was good. (The attacks at Unsan and Sudong were the "First Phase Campaign," while the battles at the Chongchon River and Chosin Reservoir were the "Second Phase Campaign." and the chase of UN forces out of North Korea was the "Third Phase Campaign.")

With the ROK collapse, it appeared the Chinese might be able to get into the rear of Eighth Army and surround the Americans. General Ridgway reluctantly ordered the evacuation of the South Korean capital and withdrawal south of the Han River on January 3, 1951. The general absolutely believed that there would be no full-scale evacuation of the peninsula, but he did order that the fortification of the old Pusan Perimeter line along the Naktong River, which MacArthur had ordered in December, be expedited should further withdrawal be necessary.

The UN forces were still disorganized as a result of the defeat and withdrawal from the north. The ROK units had suffered over 45,000 casualties in North Korea, and the replacements they had received were little more than raw recruits. When US Army Chief of Staff J. Lawton

Collins inspected the front just before the death of General Walker, he pronounced the Korean units fit only for rear-area guard duty. American units suffered from low morale stemming from "the Big Bug-Out," and had not yet received sufficient replacements to bring them up to full strength. Many GIs looked forward with anticipation to leaving a country they had come to hate. Their lack of fighting spirit and unwillingness to maintain contact with Chinese forces contributed to the lack of warning about the new offensive.

Since the Chinese did not have a force strong enough to lay siege to Seoul, the UN evacuation of the city initially took Marshal Peng by surprise. The PVA 13th Army struck toward the city early on January 3 and soon the US 24th and 25th infantry divisions and the newly arrived British 29th Infantry Brigade bore the brunt of the main Chinese attack. In fierce hand-to-hand fighting, the 19th Infantry Regiment of the 24th Division saw the Chinese overrun Echo and Golf companies around Uijeongbu, opening the way to Seoul. Only US artillery and air strikes, which inflicted 700 casualties to the Chinese, allowed the regiment to withdraw successfully.

IX Corps continued to retreat, covered by the 27th Commonwealth Brigade. The US 24th Division departed Seoul that night, while the Commonwealth Brigade crossed the Han River shortly after dawn on January 4. All IX Corps forces were out of Seoul by 0740 hours; the British 29th Infantry Brigade crossed the Han bridges at 0800 hours, while the US 27th Infantry Regiment fought on the outskirts of the city until 1400 hours. When the PVA 38th and 50th corps raised the North Korean flag at the Seoul City Hall at 1300 hours, Seoul was a city on fire. Most of the civil population had left days earlier. The next day, General Ridgway ordered a withdrawal from the Han to form a new defensive line, "Line D," roughly along the 37th parallel between Pyeongtaek and Changwhon. As the UN forces withdrew southward, they blew up facilities at Kimpo airfield and the port at Inchon.

Marshal Peng ordered his leading units to halt south of Seoul. On January 7, he stopped the offensive due to troop exhaustion and fear that if he moved further south MacArthur might stage a second Inchon invasion. Despite their success, the PVA was now completely exhausted. PVA Deputy Commander Han Xianchu reported that even though there had only been 8,500 battle casualties in the offensive, poor logistics and exhaustion were responsible for the loss of the "backbone" of the army. Mao approved the army holding south of the Han to regain its strength in preparation for a new offensive in the spring.

The Third Battle of Seoul was a significant success for PVA and the morale of the UN forces was at its lowest point of the war. Over the next two weeks, General Ridgway took immediate steps to restore morale and fighting spirit, firing several senior officers who had not stepped up to the emergency following the Chinese intervention. By January 17, Tokyo had abandoned all thought of evacuation of UN forces from Korea and Ridgway was already planning what would become Operation *Thunderbolt*, the UN counterattack that was launched on January 25. The UN strategy now returned to repelling aggression and pushing the communist forces north of the 38th Parallel. The war aim now was restoration of the *status quo ante* of June 25, 1950, and the struggle to achieve that would become the protracted campaign of the next two and a half years.

While the carriers of Task Force 77 had joined with FEAF in maximum-effort strikes against the logistics of the Chinese forces during the new offensive, the stabilization of the front in mid-January led ComNavFE to conclude there was no longer a need for four fleet carriers in the task force. *Leyte*, which had been on station continuously since she first arrived in mid-October, returned to Yokosuka on January 21, having set the all-time carrier record of 93 days on station. At the end of the month, she sailed for Hawaii and then through the Panama Canal to return to the Atlantic Fleet.

With Task Force 77 now composed of three carriers, operation schedules were established to allow each carrier to spend ten days of each month in Yokosuka, where the crew would receive shore leave. This operation tempo would prevail through most of the rest of the war with little exception until the final battles, where four carriers would again operate in the Sea of Japan.

Most importantly, the carriers constituted the largest tactical air force in close striking range to the battlefield. The Chinese offensive had forced the evacuation of Kimpo airfield, the main Air Force base on the peninsula after the Inchon invasion, and Suwon further south. The Fifth Air Force squadrons were divided between the jets, which had been evacuated back to Kyushu where there were concrete runways for their operation, and the F-51 Mustangs that could still operate from the more primitive airfields left under UN control in South Korea.

Task Force 77's aviators were trained in close air support, and could carry maximum ordnance loads, due to the carriers' position off the peninsula.

The Marines were most affected by this change in strategy. Ridgway quickly removed the 1st Marine Division from Almond's command in X Corps and effectively brought them into Eighth Army. Importantly, the Marine Air Wing was subsumed into FEAF and placed under Air Force control. The "Mud Marines" would no longer be the sole beneficiaries of their airborne comrades' experience in close air support. Since there would be no further amphibious operations in Korea, the division became another UN unit on the front line.

During January, USS *Bataan* operated the 24 F4U-4 Corsairs of VMF-212 as part of Task Group 95.1 off the west coast to provide close air support to the UN forces. On January 18, Captain R. G. Patterson's Corsair was hit by enemy antiaircraft fire. He headed south toward friendly territory but was forced to crashland near Suwon, behind enemy lines. Uninjured in the crash, he got out while the other three members of his flight formed a RESCAP to keep enemy troops at bay and an Air Force R-5 flew up from Pyongtaek to pick him up. After 29 minutes spent dodging enemy soldiers, the three Corsairs were able to clear the area by strafing and he was picked up without difficulty.

First Lieutenant Alfred Ward wasn't as lucky the next day when his Corsair took a hit while strafing enemy troops near Kumchon and exploded when it hit the ground. The next day, Captain Alfred Agan took a hit while attacking an enemy position in Inchon. He had the choice of landing on the beach in enemy territory or trying to crashland on a nearby island where friendly forces were present. Unfortunately, while gliding toward the island, he ran out of airspeed and was forced to ditch before reaching the island. He got out of the plane, but unfortunately he wasn't able to get his raft out before the Corsair sank at 1210 hours, leaving him in the 35-degree water. *Bataan* was 60 miles away and 40 miles from Pyongtaek, the nearest land base with a helicopter. By the time the carrier's HO3S-1 reached him at 1320 hours, the crew found him dead of exposure. Adverse sea conditions prevented them recovering the body for another hour.

In the ship's report of the incident, the recommendation was made that "it is clear that it is better to risk a landing in enemy-held territory than in cold water when it is in any way probable that rescue cannot be made immediately." It was pointed out that in several other rescues, there was only one occasion when it was not possible to rescue the downed pilot from behind enemy lines. Navy doctor Lt Cdr W. H. Jarvis, who examined Captain Agan's body, noted that his "poopy suit" had failed at the left wrist and the suit was filled with approximately four gallons of water. "This cold water undoubtedly hastened his death by exposure and drowning." The report continued that the Mark II exposure was prone to failure with "too great a possibility of leakage at the wrist and neck." A recommendation was made that a new suit designed like the Underwater Demolition Team suit (an early "wet suit") be developed. It was a problem that would haunt naval aviators flying over cold Korean waters for the rest of the war.

Throughout the UN counteroffensive, which began in January 1951, *Bataan* alternated with the Royal Navy carrier HMS *Theseus* to provide close air support on the western end of the battlefield and air cover to the ships of Task Force 95 operating off the west coast. An idea of just how sustained and difficult these operations over the first three months of 1951 can be seen in the losses of pilots in VMF-212 and their replacement VMF-312 that came aboard in early March. VMF-212 sustained three losses in January, in which one pilot was rescued, with no losses in two tours in February despite the 24 Corsairs flying 40–45 sorties per day on the days when snow showers and fog did not cancel operations. Losses rose as the fighting became more intense in the spring of 1951, when VMF-312 had four casualties during two tours in March and early April while flying a similar operations schedule; two pilots were rescued from behind enemy lines by the ship's helicopter and one was able to bail out over friendly territory, while their commanding officer, Major Frame, who was shot down at the end of their second combat tour on April 4, died in the helicopter from his wounds after successfully being picked up.

FEAF HQ issued a directive for "Interdiction Campaign No. 4" in mid-December 1950, which divided Korea into 11 zones and targeted 172 highway and railway bridges, tunnels, marshaling yards and supply centers. Following issuance of this directive, General Stratemeyer approached Seventh Fleet commander Admiral Turner Joy on January 15, 1951 about the Navy joining the Air Force interdiction campaign. The admiral responded that the Navy had its hands full providing battlefield close air support. On January 16, FEAF requested the Navy assume responsibility for interdiction in northeastern North Korea on a temporary basis since the region was beyond the range of Air Force units. At a joint conference on January 18, Admiral Struble had argued that battlefield close air support held the key to victory. The conference overruled the Navy's argument and Task Force 77 reluctantly embraced interdiction when this was made a continuing responsibility at the end of the month. Task Force 77 would finally be released from all battlefield close air support except in emergencies on September 20, 1951.

Beginning in late January, Task Force 77's focus changed from battlefield support to interdiction, with their first strikes against east coast bridges south of Wonsan flown on January 29. The Air Force argument was valid, since the carriers were in the best position to accomplish this role due to the fact their "airfields" could move as needed to the new area of operations.

Even when based in Korea, F-80 fighter-bombers lacked the range and ordnance load to accomplish much against targets north of the Pyongyang–Hungnam line. Northeastern North Korea, where the majority of supplies from both China and the Soviet Union entered the country, was completely out of range. While the Navy pressed the fact that their aviators were better trained in battlefield close air support than the Air Force, the Air Force and Army both stressed the fact that interdiction missions behind the lines were crucial to forestalling a renewed Chinese offensive.

While *Philippine Sea* and *Princeton* had jet fighter squadrons capable of providing escort for the propeller strike aircraft if the MiGs in Manchuria decided to oppose strikes in this region, *Valley Forge*'s Air Group 2 was an all-prop group, and was thus confined to battlefield close air support. Task Force 77 took on both roles, close air support and interdiction. However, when the two carriers on station included *Valley Forge*, the number of interdiction strikes that could be flown was reduced to one mission per day as opposed to two when *Valley Forge* was off the line.

UN forces were soon to take the offensive, and the primary focus of the fleet's pilots would return to the battlefield for nine crucial weeks. Following a reconnaissance in force by the 27th Infantry Regiment that began on January 15 and got as far north as Suwon, Operation *Thunderbolt*, the first major offensive under General Ridgway's leadership, commenced on January 25, with troops of I and IX Corps moving up the west coast toward Inchon and Seoul.

In the face of overwhelming Chinese superiority in manpower, Ridgway's strategy was to utilize superior firepower, both with artillery and air support. Task Force 77 gave full battlefield close air support for this, while cruisers and destroyers offshore provided heavy gunfire support. By February 9, UN forces had reached the Han River. On February 5, the Marines, who had received sufficient well-trained replacements in early January to return to full fighting strength, advanced up the center of the peninsula in Operation *Roundup*.

The PVA counterattacked and achieved initial success in the Battle of Hoengsong, fought between February 11 and 15. Once again, the Chinese were able to flank the American positions and surround them because of the failure of the ROK units. The Chinese took control of the narrow, twisting valley north of Hoengsong, which contained the road that was the only escape route for the Americans. Hundreds of US infantry, field artillery and supply troops were killed.

The Battle of Hoengsong, which was one of the worst US defeats during the war, saw Chinese troops strip the dead and wounded of their heavy winter clothing and shoes, because they lacked such winter gear. Then one of the worst war crimes committed during the war occurred. With the wounded GIs now POWs, the Chinese tied their hands behind their backs, then shot the men in the head, leaving the bodies on the field. The freezing cold prevented any decomposition of the corpses, which were found a month later when Marines of the 1st Division retook the valley. A sign was posted by the Marines, which reflected the outrage felt by the troops and their dislike of a war officially called a "police action:" "Massacre Valley, Scene of Harry S. Truman's Police Action. Nice Going, Harry!"

Between February 13 and 15, American and French units stopped the Chinese in the Battle of Chipyong-ni, later called "The Gettysburg of the Korean War," since it marked the high water line of the Chinese advance into South Korea. The 23rd Regimental Combat Team, which fought the battle, was one of the few US Army units to come out of North Korea in good fighting order, due to the outstanding leadership of their commander, Colonel Paul L. Freeman, Jr. Moving ahead of the rest of X Corps, the 23rd RCT arrived at Chipyong-ni on

February 3 and took position. On February 12, the Americans were joined by the French Infantry Battalion. The combat team included the 82nd Antiaircraft Artillery Automatic Weapons Battalion, which was equipped with M19 fully tracked weapons carriers armed with twin 40mm Bofors cannon, and M16 halftrack weapons carriers armed with quad .50-caliber machine-gun turrets. These weapons had been proven deadly in defending against massed infantry assaults during the fighting at the Chosin Reservoir. Fire support was provided by the 105mm howitzers of the 503rd Field Artillery Battalion.

The Chinese deployed a force of some 8,000 men from the 343rd and 344th regiments of the 115th Division, 39th Army; the 356th and 357th regiments of the 119th Division, 40th Army; the 359th Regiment of the 120th Division, 40th Army; the 375th Regiment of the 125th Division, 42nd Army; and the 376th and 377th regiments of the 126th Division, 42nd Army, with the goal of surrounding Chipyong-ni and wiping out the UN force. The UN units deployed 2,500 infantrymen.

The first Chinese attack was made the evening of February 13; the assault was stopped by the antiaircraft weapons and field artillery, but fighting was intense all along the perimeter, with the Americans taking 100 casualties throughout the night. The next day, despite extremely poor weather conditions, Marine and Navy Corsairs and Skyraiders provided air cover throughout the daylight hours, which kept the Chinese at bay. The night-fighting Corsairs of VMF(N)-513 and the Tigercats of VMF(N)-542, as well as the Corsair night fighters of *Princeton*'s VC-3 detachment, provided cover through the night while fighting continued with the Chinese mounting "human wave" attacks that saw them break into the perimeter. Fighting was hand-to-hand at several points. The Chinese did not break off at daybreak, and Marine Corsairs flew close air support missions dropping napalm in repeated strikes against Chinese troops inside the perimeter before they finally withdrew out of the American position around 1400 hours. By 1700 hours, the tanks of the 5th Cavalry's Task Force Crombez arrived and the Chinese broke off the fight. The UN troops lost 51 killed, 250 wounded, and 42 missing, while Chinese losses were approximately 1,000 killed and 2,000 wounded.

Chipyong-ni was the first clear victory by the US Army against the People's Volunteer Army, and as such it was an incredible morale boost for GIs who had to this point seen the Chinese as invincible. A critique of the battle by leaders of the PVA stated:

> In the conduct of the battle command, we have underestimated the enemy. In view of their past characteristics in battle, we expected the enemy to flee at Chipyong-ni, after the enemy at Hoengsong was annihilated.

Colonel Freeman stated in his after-action report that without air cover, the 23rd RCT would have been lost.

By the end of February, much of the People's Volunteer Army had withdrawn to the north side of the Han River. Marshal Peng expected the Americans and their allies to consolidate their gains before attempting further advance, but he was surprised when General Ridgway launched Operation *Killer* on February 20 with the goal of pushing the PVA forces further north on the eastern end of the now-continuous front. By early March, the UN forces had arrived on the "Arizona Line" that was their goal and paused, now ready to assault Seoul and drive the enemy to the 38th Parallel.

Operation *Ripper* commenced on March 6, preceded by the largest artillery bombardment of the war, with the heavy cruiser *St Paul* joining US Army artillery to blanket the front from Inchon to Seoul. The 25th Infantry Division crossed the Han, followed by the rest of Eighth Army. On the night of March 14–15, units of the ROK 1st Infantry Division and the US 3rd Infantry Division liberated Seoul; this was the fourth and last time the South Korean capital would change hands. Faced with the possibility of encirclement, the PVA forces withdrew from Seoul. By March 22, Operation *Ripper* had achieved its goal with the capture of Chuncheon, just south of the parallel. However, the goal of achieving destruction of the PVA was frustrated when the Chinese withdrew from positions just before UN forces attacked, thus preserving themselves. At the end of March, UN forces were again on the 38th Parallel, but the enemy showed little sign of being willing to quit.

During the first three months of 1951, Task Force 77 had mounted 4,720 sorties in January, 4,931 in February and 7,146 in March. Twelve thousand bombs and 7,500 rockets had been expended in January, 11,600 bombs and 12,300 rockets in February, and 21,996 bombs and 15,918 rockets in March. As communist forces were able to bring antiaircraft units south to the battlefield, losses grew. Six Corsairs and one Skyraider were lost in combat in January, with a similar number in February, while a Panther, nine Corsairs and two Skyraiders were lost in March.

At the end of March, *Philippine Sea* reported that during the first 20 days of the month, 203 of the 352 offensive sorties flown by Air Group 11 were against bridges, with the result that 11 bridges were totally destroyed and 62 so significantly damaged that they were inoperative for a significant period of time. Initially, good success was found with bridge destruction, but the enemy quickly learned how to repair bridges sufficiently to maintain operation and increased the work force assigned to rail repair. Over the next two years, naval aviators would find themselves striking bridges that had been knocked down several times before.

Valley Forge, which had been in the fight since the beginning of the war with the exception of three weeks in November–December when she finished her tour and retired to the United States before returning with Air Group 2 on an emergency basis, was finally sent back to the west coast for repair and overhaul in late March. She was replaced by a newly rejuvenated *Boxer*, with Air Group 101 embarked. Her return marked the arrival of the first organized reserve air group in the war.

CHAPTER 10

THE BATTLE OF CARLSON'S CANYON AND THE HWACHON DAM

With the success of General Ridgway's counteroffensive in the spring of 1951, the need for close air support by the carriers of Task Force 77 was reduced. The need now was to cut off the enemy's supplies. However, effective interdiction of the supply lines remained difficult throughout the war. In part, the problem was that if even only a part of the supplies sent south from Manchuria reached the front, that could be sufficient to meet the enemy's needs. While an individual soldier in Eighth Army needed 50 pounds of supplies per day, the Chinese survived on ten pounds per man per day, or 50 tons per day per division. Primitive as it was, the North Korean transportation system was more than adequate to meet these minimum demands, even after the destruction wrought so far in the war and the fact that trains were limited to night movement only due to UN air superiority.

Despite the UN bombing campaign and the general increase in strikes against the North Korean transportation system, in March 1951 it was estimated that the west coast rail line in North Korea had a maximum capacity of 500–1,000 tons per day, while the east coast line was capable of 500 tons per day. The west coast highway system was capable of 1,000 tons per day, with the east coast highways capable of 500 tons.

Simply put, the enemy could operate on fewer supplies than could the UN forces, and they were able to move what they needed despite the aerial interdiction campaign. Indeed, one of the most important parts of the enemy's transportation system was the oxcarts that brought the supplies the last 30–50 miles to the front lines. This would be the problem faced by the UN air forces throughout the war.

Successful interdiction of both the rail and highway system was dependent on bridge demolition. Reinforced concrete bridges had proven hard to hit and destroy in World War II. In Korea, it was found that the Skyraider was the only bomber capable of destroying the bridges, since it was able to carry three 2,000lb bombs on a sortie. Carrying this ordnance load, it was estimated that complete destruction of a modern bridge took 12 to 16 aircraft. Bridge destruction had a greater effect on rail transportation than on roads, since all the roads in North Korea were gravel or dirt and thus easily repaired.

On February 28, Admiral Ralph Ofstie, in his position as Commander Task Force 77 while aboard *Philippine Sea* as Commander Carrier Division 1, sent a memorandum to ComNavFE Admiral Struble in which he proposed to focus the efforts of the task force in the area north of the port of Hamhung, the road and rail complex south and west of Hamhung-Wonsan, and the road between Hamhung and the Chosin Reservoir. This was approved by Admiral Struble in early March.

The campaign against the bridges was carefully planned. North Korea had 395 major bridges in eastern North Korea, a list of potential targets that was narrowed to 48 "key bridges." The attacks on these "key bridges" would be supplemented by destruction of minor bridges and track breaking where necessary. The battleship *Missouri* and several heavy cruisers that constituted Task Force 95's "big guns" were also deployed to attack the rail line along the coast in specific places where it ran near the shoreline.

The usual composition of a bridge strike group was two divisions of F4U-4 Corsairs tasked for flak suppression, carrying 220lb fragmentation bombs and 250lb general purpose bombs; an additional two divisions of Corsairs armed with 1,000lb bombs tasked with hitting the railroad on either side of the bridge; and as the backbone of the force, two or three divisions of Skyraiders, each loaded with three 2,000lb bombs to knock down the bridge structure. While these targets were not well defended at the outset of the campaign, the enemy brought in additional antiaircraft weapons as the campaign became more effective. Panthers replaced the Corsairs for flak suppression, striking before the propeller attack planes arrived. Comprehensive and continuing aerial photography was required throughout the campaign, due to the enemy's increasingly effective demonstrated ability to quickly repair bridges.

The effort to destroy the most famous of the east coast bridge structures, the 600ft bridge eight miles south of Kilchu on the line from Kilchu to Songjin, became a battle in its own right. South of Kilchu, the rail line was protected by numerous tunnels through the hills in which a train could hide when bombers were in the vicinity. The line emerged at this point to span a wide gully, disappearing at the far end back into a tunnel. At the time the bridge was spotted, two tunnels had been constructed for double tracking. Two sets of piers had been erected, but only a single six-span bridge 650 feet long and 60 feet high had been completed, while the other was still under construction. The tunnels at either end of the bridge made it difficult to bypass if it was taken out, while the height made it difficult to repair since it would have to be rebuilt to correspond with the tunnels. The effort to destroy the bridge, which Admiral Ofstie named "The Battle of Carlson's Canyon" in honor of Lt Cdr Harold G. "Swede" Carlson, commander of *Princeton*'s VA-195, demonstrated all the problems associated with the campaign regarding the effectiveness of the strikes and the enemy's efforts at repair.

On March 2, Lt Cdr Clement Craig, CO of VF-193 "Ghost Riders," spotted the bridge construction as he returned to *Princeton* that morning from a rail strike further north. He later recalled, "It was just luck that I altered my course back to the ship, and spotted the work going on over the other side of the hills I had been flying past." On his return to the ship with the information, a hasty strike was organized that afternoon, which damaged the southern approaches to the bridges.

The next day Lt Cdr Carlson led a second strike of Skyraiders against the bridge. The attackers dropped one span, damaged a second, and shifted two more out of line. *Princeton* refueled the next day, and operations were canceled due to bad weather on the two days following. A second follow-up attack on March 7 saw the northernmost of the two previously shifted spans dropped into the canyon.

Following the second attack, supplies were quickly backed up. Vehicles were brought in to truck the supplies past the broken bridge while the North Koreans brought in more laborers and began an energetic effort at repair. Another strike was flown by Corsairs from VF-193 and 194, dropping 220lb fragmentation bombs and 250lb general purpose bombs on the road traffic, while VA-195's Skyraiders dropped two additional bridge spans. That night, the F4U-5N Corsairs of *Princeton*'s VC-3 detachment and the AD-3Ns of the VC-35 detachment harassed the North Korean bridge repair efforts and took the first loss of the battle when VC-3's Lt (jg) B. H. Cook crashed into the sea after being hit by defensive fire near the bridge. *Princeton* again refueled on March 9, and poor weather reduced operations the next day.

Princeton's night hecklers began a cat-and-mouse game with the bridge repairers during the next six days. However, photo-reconnaissance on March 14 showed that the bridge repair was proceeding, with wooden structures under construction to replace the missing spans. The next day, Carlson led three divisions of Skyraiders carrying napalm to burn the wooden structures. Strike number four destroyed the new construction, dropped another span on the southern end and damaged the northern approach to the bridge.

The enemy was persistent, and within a few days photo-recon spotted large piles of wooden ties that had been assembled in the gully to begin reconstruction. At this point, Admiral Ofstie recommended to Admiral Struble that Fifth Air Force Bomber Command be asked to mount a mission against the bridge in which delayed-action bombs would be dropped in the gully. This was done on March 18, but a photo-recon mission on March 20 revealed that the enemy had again brought in construction supplies. FEAF B-29s again dropped delayed-action bombs in the gully on March 24 and the mission was repeated three days later.

A photo-recon mission on March 30 found that repair of the four central spans and the northern approach to the bridge were finished. Transverse bracing had been installed and it was obvious rails would be laid soon. Carlson led a four-division strike with two divisions carrying napalm and the other two carrying three 2,000lb bombs each on April 2. The Skyraiders burned down all the wooden structures and the rest of the concrete spans, leaving only the concrete piers standing. The 30-day "battle" came to an end.

The North Koreans persisted. The destruction of the bridge spans forced a change of plans. Reconstruction was abandoned, while the repair crews went to work building a four-mile serpentine that bypassed both the bridge and the tunnels. This required building eight new wooden bridges, but they were all short and low and would be easily repaired or rebuilt, as was shown when several were knocked out in April and rebuilt within a matter of days.

On April 4, after *Princeton* had engaged in 38 days of concentrated interdiction efforts, she headed for Yokosuka and an overdue period of maintenance and rehabilitation. During this campaign, 54 rail and 37 highway bridges had been "rendered inoperable," 44 had been damaged to different degrees, and the tracks were broken in over 200 locations. Reports of attacks against targets such as personnel, rolling stock, and guns cannot be taken as more than approximations only. But the bridge destruction claims can be taken in confidence: "inoperable" was used when photographs provided evidence of one or more spans actually dropped.

This major effort by *Princeton*'s air group and FEAF Bomber Command had denied the enemy use of a major rail transportation complex for two months, but Task Force 77's three carriers could not keep up such an effort against a single target while there was a demand that many other targets be hit. The sequence of bombing a bridge, bombing the repair efforts and then bombing the enemy's clever bypasses led to much frustration on the part of fliers and planners alike. As the campaign continued, the enemy realized the rail bridges were magnets for aircraft and brought in heavy antiaircraft defenses that led to higher losses by the air groups as the bridges became flak traps. VA-195's Ed Jennings recalled, "Those bridge strikes became the most dangerous missions we flew. I hated them."

However, Task Force 77's campaign had been successful. While the east coast rail system carried two-thirds of total North Korean rail traffic in January and February, March saw the total reduced to less than half, with further reduction to less than a third in April. This would have a major effect on the coming Chinese spring offensive.

In 1956, Eighth Army commander General James Van Fleet looked back and considered the problem of the interdiction campaign. "We won the battle to knock out a bridge, but we lost the objective, which was to knock out the traffic." He went on to say:

> Repeatedly, I was assured by my own staff, and by the Air Force and Naval Air, often supported by photographs, that "a mile or more of rails at critical points" or "the bridges at Sinanju" or "the

> East Coast Line" were "out for good." But always, a few days later, locomotives pulling trains were operating at these very locations!

When it became increasingly expensive in terms of losses to attack bridges, the Navy turned to cutting the rail lines. These were easily repaired, but the constant cuts did slow down the traffic heading south. An interim evaluation report written the month after Carlson's Canyon stated:

> The enemy has shown surprising capabilities of movement at night, concealment by day, repair of road and rail breaks, repair of bridges, and construction of bypasses. This is influenced by the apparently unlimited availability of human labor.

By the summer of 1951, the communists had a rail repair force in North Korea that numbered 50,000 laborers.

In May 1953, two years after the battle, Admiral Ofstie, by then Deputy Chief of Naval Operations (Air), spoke to an aviation industry group. He stated that cutting one rail section cost the Navy $18,000; the cost of knocking out a bridge was $55,000. One Skyraider lost cost in excess of $100,000, and if the pilot was lost, the cost was over $100,000 in training alone. He concluded, "I am beginning to wonder about the value returned for the present sustained attacks in carrying out the interdiction program in Korea."

The Navy's interim evaluation report for December 1951 put the issue in stark terms, which would hold relevance to subsequent wars in Southeast Asia, Iraq and Afghanistan:

> A lesson of Korea is that the less highly developed a transportation system is, the less susceptible it is to thorough interdiction, especially by air. It is probably impossible to achieve complete interdiction of a country only partially industrialized [and] possessing mass manpower except by physical occupation. The interdiction campaign has compelled the enemy to devote a large body of manpower and military effort to countering this interdiction. But this cost to the enemy must be compared to the cost to the US, which in December [1951] was almost the entire offensive effort of TF 77, 60 percent of

> the offense effort of the 1st Marine Air Wing, and over 95 percent of the offensive effort of the Fifth Air Force in Korea.

When it had first been proposed in December 1950 that the carriers change their role from battlefield support to interdiction, the response of Seventh Fleet commander Admiral Turner Joy had been that he believed the Navy's close air support capability was superior to that provided by the Air Force, and that the Navy should continue to concentrate on the close air support/battlefield air support mission. When the Chinese spring offensive began, the Navy had a second time to demonstrate that operational superiority.

One of the most famous battlefield support missions were the Hwachon Dam strikes flown by *Princeton*'s Air Group 19 during their next tour following the bridge strikes of the Battle of Carlson's Canyon.

In 1939, the Japanese-owned Han River Hydroelectric Company began construction of a concrete gravity dam on the Han River just north of Seoul, completing construction in 1944. It was 240 feet thick at the base, with both faces reinforced by rocks. During the Eighth Army counterattack to retake Seoul, the dam was assessed by planners as a potential problem because of its ability to flood downstream areas in the plain north of Seoul and the city itself if the floodgates were opened. Alternatively, it could be closed, which would lower the level of the Han River and allow the Chinese to cross it more easily to attack UN forces. The threat became real when North Korean forces released water from the dam's spillway on April 8, 1951, which disabled five floating bridges downstream that were crucial for the UN forces. It was now essential to either capture or disable the dam to prevent further flooding during the UN offensive to reach the 38th Parallel.

On April 9, the 7th Cavalry Regiment of the 1st Cavalry Division attempted to capture the dam, but encountered a stiff defense from North Korean and Chinese forces. A second attempt was made between April 16 and 21, during which the cavalrymen secured the dam but were then forced to withdraw by a Chinese counterattack before they could destroy the floodgates. Attention now turned to destroying the dam by air attack. The first attack was made by B-29s on April 25; it was unsuccessful.

The target was handed off to the Navy, and assigned to *Princeton*. On April 30, the day the communist spring offensive began, eight VA-195 Skyraiders were launched, each carrying a 2,000lb bomb and two 11¾-inch "Tiny Tim" rockets originally developed to attack the German submarine pens in French harbors during World War II. They were escorted by five VA-193 Corsairs for flak suppression. The Skyraiders attacked the dam by dive-bombing and rocketing the locks. The objective was to blast open at least two floodgates between the dam's east and west abutments to create holes in the dam that would assure a steady flow of water. Damage was minimal, and a more effective method of attack had to be found if the target was to be disabled.

Aboard *Princeton*, Captain William Gallery remembered that the ship had a dozen World War II-vintage Mark 14 aerial torpedoes in the magazine. He suggested these be used to hit the locks and spillway, which might jam them and prevent the enemy from opening them. At first, no one could remember where in the magazine they had been stored. No one among the ordnancemen had ever loaded a torpedo aboard an airplane; they had to consult the manual to see how to fit the weapon on the Skyraider's centerline rack.

While Carlson had experience dropping aerial torpedoes from his service as a TBM Avenger pilot during World War II, it was quickly discovered that only Lt (jg) Ed Jennings, who had been trained to use a torpedo when VA-195 had been the Avenger-equipped VT-19, and three other pilots in the VC-35 detachment had ever dropped a torpedo. Among the pilots chosen for the mission, Ensign Robert E. Bennett had never seen an aerial torpedo and wasn't certain if he'd ever heard of the weapon. The torpedoes were fitted with a plywood "drag ring" on the nose that slowed its flight once dropped and protected the warhead on entry in the water, with a plywood box placed around the tailfins and propellers to protect them on entry into the water. That night, the pilots assigned to the mission studied everything they could find on proper procedure for making an attack with an aerial torpedo. The weapon had a narrow operational envelope. The aircraft dropping the torpedo had to be flying at exactly 160mph at an altitude of 100 feet, with needle and ball centered and pulling no Gs. Above that altitude, the torpedo would plunge into the water and sink. Below that, it would skip off the water.

Air Group 19's CAG, Cdr Richard C. Merrick, led the mission. VA-195 skipper "Swede" Carlson led the eight torpedo-carrying

Skyraiders. Five were flown by VA-195 pilots including Ed Jennings and three by the VC-35 pilots who had dropped torpedoes. They were escorted by a Corsair division from VF-192 and one from VF-193 for flak suppression.

Arriving over the Han River, the Skyraiders maneuvered around 4,000ft peaks to approach the dam from over the reservoir. Ed Jennings recalled, "We came in at 10,000 feet, broke into two-plane sections and dodged the little antiaircraft fire that came our way, and maneuvered to come in straight and level over the reservoir." One by one, the Skyraiders dropped their torpedoes. "One was erratic and one was a dud," Jennings remembered. "The other six hit like they should and exploded. The gates leaked and the reservoir slowly drained, but the damage to the gates was such they couldn't be opened." One floodgate was completely destroyed and the dam was breached and holed on both sides.

Destruction of the dam forced the People's Volunteer Army to change their planned attack, since they would not be able to lower the water level of the Han River. This changed the entire attack and contributed to its ultimate defeat, since they were unable to use the river water against the UN positions. VA-195, which had heretofore been known as the "Tigers," changed their name to "the Dambusters," a name the unit has kept ever since.

By the end of May, Air Group 19 had flown so much combat that the squadrons needed relief, even if the pressure of the war was such that *Princeton* could not return to the United States yet. The Air Group left its planes behind, where VF-23 took over VF-191's Panthers; VF-821 took over VF-192's Corsairs while VF-871 took over those of VF-193, and VA-55 transferred over from Air Group 5 to fly VA-195's Skyraiders. The scratch air group was known as Air Group 19X during the three months they operated aboard *Princeton* until she finally left for the United States at the end of August 1951.

CHAPTER 11

WEEKEND WARRIORS

The outbreak of war in Korea created a manpower crisis within naval aviation, which had been stretched so thin during the years after World War II. Fortunately, the Navy had organized a strong reserve system, filled with pilots who had served during the war. On July 1, 1950, Congress provided authorization to mobilize reservists, and 25,000 were immediately called up from both the organized and the unorganized reserve. By the end of the year, an additional 135,000 had been called to active service. Initially, 14 Naval Air Reserve squadrons were called up. These squadrons would receive training in current aircraft and would go to war as organized air groups. Others from the unorganized reserve, i.e., those not members of specific units who did not participate in periodic training as a unit, were sent as individuals to fleet squadrons to bring them up to full combat strength. Over the course of the war, the reserve pilots would fly nearly a third of the total missions flown by Navy and Marine Corps squadrons.

Boxer's new air group was proof the Navy was now in the Korean War for the long haul. Before the outbreak of war, Air Group 101 had been part of what were called the "Weekend Warriors." The air group was called to active duty on July 20, 1950, and the experience of VA-702 "Rustlers" was typical of how a reserve unit went to war. While the air group was nominally based for administration at NAS Dallas, Texas, the squadron was the only unit of the group actually based on the field, with the others calling naval air stations throughout the Midwest their homes. Calls began going out across the southwest that afternoon, alerting pilots and other squadron personnel that the unit had been activated. Within 48 hours, 80 enlisted men, 20 pilots, and four ground officers had reported in. They came all the way from Sweetwater, in West Texas, and Tulsa, Oklahoma, while others journeyed in from the distant towns of Kilgore, Longview, and Corpus Christi. The next day, VA-702 was declared operational.

The call to active duty required considerable sacrifice, with jobs left behind, businesses closed, families relocated, homes sold or rented. After a week, the men went aboard Navy R4D (C-47) transports and flew to NAS North Island in San Diego. Over the course of the next three weeks, they were joined by reservists from all over the country, as two complete reserve air groups were activated for training.

The pilots of VA-702 quickly transitioned from the old TBM-3 Avengers they had been flying to AD-2 Skyraiders. Their move wasn't as big as that of the pilots in VF-721 "Grim Reapers," who had previously flown F8F-1 Bearcats at NAS Olathe, Kansas; they became the first squadron to fly the F9F-2B, which was specially strengthened to take an increased ordnance load. Previously, the F9F-2 was capable of carrying two 250lb bombs and six 5-inch HVARs; now the F9F-2B could carry two 500lb bombs and either six 100lb bombs or six HVARs. The pilots of VF-791 "Fighting Falcons" from NAS Glenview, Illinois, and VF-884 "Grim Reapers" from NAS Memphis, Tennessee, had it easiest of all as they changed up from F4U-1D Corsairs to the more powerful F4U-4B.

With the regular Navy squadrons that normally called North Island home now in Korea, there was room on the home base of naval aviation in the Pacific for the units to organize themselves and commence hard training in preparation for a combat assignment. Ground crews went through schools to learn the quirks of their new charges. Pilots renewed instrument training and within a matter of several weeks were scheduled for their first carrier qualifications. One pilot remembered that over the course of the six months he was at North Island while the air group trained for combat, "I flew over 100 hours a month once we got going."

On March 7, 1951, Air Group 101 took off from North Island and landed aboard USS *Boxer*. The carrier was headed for her second deployment to Korea. They arrived in Pearl Harbor five days later; after refueling and taking on final supplies, *Boxer* departed Pearl Harbor on March 17, headed across the Pacific. On March 25, she rendezvoused with USS *Thomason* (DD-760) in Van Diemen's Strait off southern Korea and proceeded into the Sea of Japan, where she joined Task Force 77 on March 26 while *Philippine Sea* and *Princeton* were refueling.

That night, the carriers headed north to return to combat. Air Group 101 flew their first combat mission on March 27 in bad weather; only eight aircraft were sent aloft for a close support mission. The weather deteriorated further and no missions were flown on March 28 or 29.

Princeton's Air Group 19 was instrumental in bringing Air Group 101 to full combat readiness as quickly as they were able. Leaders of *Princeton*'s squadrons came over to *Boxer* on her arrival and gave detailed briefings about operating procedures and the current situation to the pilots. Additionally, *Princeton* provided strike leaders for *Boxer*'s initial missions as "bird dogs," flushing out targets for the newcomers. The success achieved resulted in this becoming the standard operating procedure when a new air group reported to the task force.

On March 30, operations recommenced, with the Corsairs and Skyraiders providing close support on the battle line while the Panthers flew armed reconnaissance missions along the enemy supply routes. On April 7, support missions were flown in poor weather to cover a raid by the Royal Marines 41 Commando to blow a railroad bridge south of Songjin, during which the air group took their first loss when Lt (jg) H. T. Walker's F4U-4B was hit in the engine. When he attempted to force land on the beach near the village of Tanch-on, he flew into a fog bank and was never seen again.

That night after the end of flight operations, *Boxer* received Com7thFlt Secret Order 75-51, which was a direct order from the Supreme Commander, MacArthur. In company with *Philippine Sea*, which had arrived off Korea on her second Korean deployment shortly after *Boxer*'s arrival, *Boxer* turned south and transited Tsushima Strait during the night, then turned south-southwest as the carriers headed for the Taiwan Strait. This move was unknown in Washington.

At the same time the carriers were departing the Sea of Japan, President Truman and his senior advisors were in deep disagreement over the latest outrage committed by General Douglas MacArthur. On April 5, Republican Congressman Joseph L. Martin had publicly released a letter written to him by MacArthur on March 21, which concluded:

> If we lose the war to communism in Asia, the fall of Europe is inevitable, win it and Europe most probably would avoid war and yet preserve freedom. As you pointed out, we must win. There is no substitute for victory.

On the same day, without consulting his superiors in Washington, the general announced in Tokyo that he had authorized General Ridgway to cross the 38th Parallel again.

President Truman saw this as the last straw in his battle with his senior general over civilian control of the military that had gone on since the outbreak of war. In January, the president had given MacArthur a direct order that he was not to send UN forces across the border under any circumstances, which followed a previous direct order on December 6, 1950 that the general was not to make any public statements about the conduct of the war without first receiving authorization to do so from the president. Writing later, Truman stated that he was so furious, "I was ready to kick him (MacArthur) into the North China Sea, I was never so put out in my life." The British government officially called the Martin letter the "most dangerous" of an "apparently unending series of indiscretions," and claimed it was another irresponsible statement made without the authorization of the American or any UN member government.

Political events were moving to a head in Washington as the two carriers crossed the Yellow Sea. In a second meeting called by the president, Secretary of Defense Marshall and Joint Chiefs Chairman Bradley still opposed relieving MacArthur. The Joint Chiefs met with Secretary Marshall in his office following the meeting; each one agreed MacArthur's relief was necessary and desirable from a "military point of view," while recognizing the secondary importance of such military considerations. CNO Admiral Sherman's opinion that "if MacArthur were not relieved, a large segment of our people would charge that civil authorities no longer controlled the military" was supported by the others. Marshall, Bradley, presidential advisor Averill Harriman and Secretary of State Dean Acheson met again with the president on April 9 at Blair House, where the president was informed by Bradley of the Joint Chiefs' position. Importantly, Marshall stated he now agreed. The timing of the event was the only remaining decision.

That would be provided by the Navy.

Two days later, on April 11, *Boxer* and *Philippine Sea* arrived on station off the west coast of Taiwan at 1100 hours. The two carriers then launched all aircraft in an "aerial parade" along the east coast of mainland China, just outside of territorial waters, then known as "the three-mile limit." It was a deliberate provocation of China by

MacArthur, who hoped the Chinese response would lead to the open war he had long advocated. It was extremely risky, had the Chinese made a military response, since only *Boxer* had any jet aircraft aboard.

As *Boxer*'s Air Group 101 and *Philippine Sea*'s Air Group 2 flew their "aerial parade" down the Taiwan Straits, USS *John A. Bole* (DD-755) took station offshore of the Chinese seaport at Shantou just outside the three-mile limit. The destroyer was quickly surrounded by an armada of 40 armed junks. When the "aerial parade" arrived at 1300 hours, the aircraft made threatening passes at the Chinese vessels surrounding the *Bole*. By 1500 hours when the ship departed, neither side had initiated hostile action.

That night, the carriers withdrew from the straits and replenished on the morning of April 12, after which they returned to their previous position and launched a second "aerial parade," which included photo-recon sorties by F9F-2Ps of *Boxer*'s VC-61 Det Fox, again approaching the Chinese mainland no closer than three miles. That afternoon, a third "aerial parade" was launched that overflew Taiwan in what *Philippine Sea*'s report for the months of March–May 1951 recorded as "a demonstration of support" for Chiang Kai-shek's nationalist government.

The ships turned northeast that evening and returned to the Sea of Japan on April 16. By that time, the results of their action had already had their effect on both the war in Korea and domestic politics in the United States.

When word of what had happened in the Taiwan Straits was received in Washington, President Truman knew the time had come to fire MacArthur. In a 1973 article on the event in *Time* magazine, Truman was quoted as having said in the early 1960s:

> I fired him because he wouldn't respect the authority of the President. I didn't fire him because he was a dumb son of a bitch, although he was, but that's not against the law for generals. If it was, half to three-quarters of them would be in jail.

The act set off a political firestorm in the United States that lasted for nearly three months before it ended with MacArthur's farewell speech to Congress in which he declared that "old soldiers never die, they just fade away." MacArthur did indeed fade away and the political fires died to embers by the end of summer. In the meantime, General Ridgway replaced MacArthur as supreme commander, with General James Van Fleet assuming command in Korea. For Task Force 77, the war continued, one mission after another. The next three months would see some of the most important missions flown in the war as the UN forces met and defeated the Chinese spring offensive.

Boxer and *Philippine Sea* flew 112 sorties against targets around Wonsan on April 16, the day they returned back on station in the Sea of Japan. That night, *Princeton* joined the task force and the next day the three carriers struck Hamhung, where Air Group 101 lost Lt A. W. C. Thomas. It was believed he had struck either a high tension wire or a wire trap during his strafing run, as he called out "Look out for the wires!" an instant before his F4U-4 exploded and disintegrated. Air Group 101 flew 95 of the 180 sorties sent against Hamhung, which left the railyard in ruins.

Air Group 101's first tour had been very eventful, with the fliers unwittingly participating in one of the biggest "near misses" of the limited war Korea had been declared to be, when the Chinese were intelligent enough not to take MacArthur's bait for wider war. During the break from operations at Yokosuka, VA-702 was among the first Skyraider squadrons to receive the new AD-4 sub-type. The AD-4 benefited from the combat experience gained in Korea: additional armor was located around the oil cooler and an armored ring was fitted around the front of the cowling to protect the R-3350. This difficult engine was unlike the dependable R-2800, which could have one or two cylinders shot off and still get a pilot home, which meant the additional armor would be very welcome by the pilots. Also, the gun armament was doubled from two to four 20mm cannon. Additionally, the Mod 5 Mark 4 rocket launching rails under the outer wings were replaced by the Aero-41 Able rack, which considerably increased the Skyraider's already-formidable bomb load. The new capability of the toughened Skyraiders would be put to the test during the second tour.

May 1951 saw some of the toughest fighting of the war, as the People's Volunteer Army commenced their fifth offensive of the war, known to the UN command as the Chinese spring offensive. General Van Fleet took command of Eighth Army on April 22, the same day the Chinese offensive began. This time, Eighth Army G-2 had good intelligence and knew they were coming. The 1st Marine Division, positioned in the "Iron Triangle" east of Seoul, was the first Chinese target.

Though they gave up substantial ground to the enemy, the Marines held against the assault. They broke the Chinese advance by April 24, with the attackers suffering high casualties. Simultaneously, the 27th Commonwealth Brigade fought off repeated attacks by the PVA 118th Division between April 23 and 25. The Canadian Army's Princess Patricia's Light Infantry were surrounded and cut off for 24 hours but held their ground; they were supported by air drops until they were relieved. The British 29th Brigade fought an epic battle on the Imjin, suffering heavy losses of 1,000 killed, wounded or captured, but managed to hold off the Chinese. The rest of the UN forces withdrew to prepared positions where they contained the offensive. The UN center was stabilized by April 25, with the surviving attackers withdrawing.

By April 26, UN commanders were confident that the Chinese offensive had failed. Where five months earlier UN troops had retreated in confusion, they stood and held against the enemy's best effort. Refusing to accept defeat, Mao ordered Marshal Peng to renew the offensive, reinforcing failure. On May 15, 29 Chinese and nine North Korean divisions advanced 30 miles and struck the ROK III Corps, which again collapsed. The American 2nd Division, which had only recently been declared combat-worthy after being rebuilt following its ordeal in North Korea, held firm. The 38th Infantry Regiment stopped repeated heavy attacks on the night of May 16; the battle's intensity is shown in the record of one field artillery battery that fired 12,000 105mm shells in 24 hours. The 3rd "Rock of the Marne" Infantry Division lived up to its name, filling the gap created by the ROK retreat in company with the paratroopers of the 187th Airborne Regimental Combat Team. The offensive came to an exhausted end on May 20, with the Chinese suffering 90,000 casualties. UN ground commanders were quick to credit the airmen who had flown such effective close air support missions with providing them the "decisive edge" in combat, without which the outnumbered UN troops would have been overwhelmed.

Boxer's return to Task Force 77 on May 2 saw operations canceled in the afternoon due to heavy sea fog, but the operations schedule returned to its previous tempo the next day as the three carriers again struck interdiction targets. VA-702 took their first combat loss on May 7 when Lt (Jg) F. B. Robbins was hit while flying a close air support mission. His Skyraider caught fire and crashed as he came off a strafing run. Three days of fog in the Sea of Japan forced air operations to cease, but on May 11 the air group struck two railroad bridges east of Pyongyang that had proven too difficult for the Air Force level bombers to knock down. One span was dropped at the first bridge and three at the second.

When the strike was launched for the Pyongyang mission, one F4U-4B and one AD-4 were lost due to engine problems. The Corsair suffered engine failure on takeoff and settled immediately into the water, while the Skyraider suffered engine trouble as the pilot attempted to join up with his division. Upon notifying the ship, he was directed to return. As he turned into the landing pattern with power fading, he lost control when he turned to final approach and spun in. He was quickly picked up by the ship's "Horse," and returned aboard little the worse for wear.

Four days later, VA-702 held a unique ritual in their ready room, in which the pilot was awarded a "citation," which read:

> The Kremlin
> 15 May 1951
> From: The Commissar-Awards and Decorations
> To: The Working Masses of the World
> Subj: Assistant Hero of the Soviet Union; awarding of
> CITATION
>
> To LT. (now Midshipman) John R. Toughluck USNR, for his outstanding skill, dexterity and intrepid technique in handling an aircraft, the Kremlin, by direct order of that true comrade, hailed by all, our own Uncle Joe, bestows and confers on Lt. (now Midshipman) John R. Toughluck, USNR, the order of Assistant Hero of the Soviet Union; said order to be worn hence-forth and forevermore and Lt. (now Midshipman) John R. Toughluck, USNR, shall be entitled to all its rights and privileges from this date forward.
>
> Lt. (now Midshipman) John R. Toughluck, USNR, above and beyond the call of duty, did, in keeping with the highest purging traditions of the Soviet Union, against the inherent stability of the filthy capitalistic Douglas Skyraider aircraft, on May 11, 1951, maneuver said lousy capitalistic aircraft into such a position as to effect total and complete destruction of said degenerate aircraft.
>
> /s/ Ivan Michailovitch
> Airman Recruit (1/2 class) Soviet Air Force

The event was a joke to reduce tension for the pilots. Over boisterous laughter, the squadron duty officer gave a pompous reading, while the pilot accepted with a few words in Russian, which he had studied in college. The ship's public information office recorded the proceeding and sent it to Tokyo, where it was broadcast by Armed Forces Radio Service the next month. The final result was even more amusing to the squadron when they were informed that following the broadcast, the Soviet Embassy in Tokyo had protested the "slander."

On May 18, two VF-884 Corsair pilots were shot down while flying close air support missions over the front. Lt (jg) Marion Thomas Dragostin was lost when his airplane was set afire by flak and exploded following the crash. Lieutenant George Garrison managed to parachute safely, but when the SAR (Search and Rescue) helicopter arrived to pick him up, he was nowhere to be found.

Two days later, on May 20, Air Group 101 flew 111 sorties, a record for the group. Four days later, VF-884 lost their leader when Lt Cdr G. L. Carmichael was hit by flak and parachuted just south of the lines. The troops who found his body reported his chest had been crushed. Throughout the days of late May, bad weather stopped or reduced operations, which was lamented inasmuch as the retreating enemy forces offered lucrative targets. On May 30, the left catapult, which had been troublesome, failed to give an F9F-2 sufficient flying speed and the Panther went in just off the bow. *Boxer*'s logbook recorded that the pilot was returned aboard by the rescue helicopter in the record time of less than two minutes.

The night of May 30, *Philippine Sea*, which had been involved in Korean combat operations twice since late August 1950, was relieved by USS *Bon Homme Richard* (CV-31), which had been recommissioned from the mothball fleet on January 15, 1951. Aboard the carrier as Commander Carrier Division Three was Rear Admiral J. J. "Jocko" Clark, the most aggressive of the fast carrier admirals of World War II, who Admiral Mitscher had recognized after the war as "my best commander." Since the outbreak of war, Clark had been fighting the Navy's bureaucracy and those in Washington who remembered his role in the "Revolt of the Admirals" to get a combat command. *Philippine Sea* departed for Yokosuka, then on to the United States. Aboard the "Bonnie Dick" was Air Group 102, the second Naval Reserve Air Group in Korea, with the F9F-2Bs of VF-781, F4U-4s of VF-783 and

874, AD-2s of VA-923, F4U-5NLs of VC-3 Det G, AD-4Ws of VC-11 Det G, AD-4Ns of VC-35 Det G, F9F-2Ps of VC-61 Det G and two HO3S-1 helicopters of HU-1 Det G. The air group had been activated from the reserves on August 5, 1950, shortly after *Bonnie Dick* had been taken out of the reserve fleet in Puget Sound. During their first combat tour, AG-102 logged 2,687 sorties in the much-improved summer weather conditions.

Boxer completed the second tour of her deployment on June 2 and headed for Yokosuka, for extended repairs to the catapults and the flight deck planking, and replacement of defective jet blast deflectors. Air Group 101 had flown 404 sorties by VF-721's Panthers and 1,495 sorties by the Corsairs of VF-791 and 884 and the Skyraiders of VA-702, a very creditable effort given that more than a third of the days the ship was on the line saw flight operations canceled due to bad weather.

Boxer and Air Group 101 returned to station off Korea on July 17, where they would participate in the final battles of the war before it turned into a stalemate while UN, Chinese and North Korean negotiators tried to find a way to end the struggle.

Following the failure of the communist offensive, Eighth Army had gone on the offensive on May 22. By early June, the 187th Airborne Regimental Combat Team and the 1st Marine Division had reached the Hwachon Reservoir across the 38th Parallel in North Korea, while the 2nd and 3rd infantry divisions had pushed forward to regain the line on the Imjin from whence the Chinese offensive had begun. The communist front was now open and the morale of the People's Volunteer Army was shattered by the realization they could not break through the UN front as they fought well-trained and well-led UN troops. American military commanders believed a second North Korean invasion at this time would end the war with Korean unification. However, the political will to attempt forcible reunification of the peninsula a second time no longer existed. The Truman administration had no desire to risk what had been regained over the spring by pressing north.

Eighth Army's offensive had been launched with an objective set by the Joint Chiefs as "an end to the fighting and a return to the status quo; the mission of Eighth Army was to inflict enough attrition on the foe to induce him to settle on these terms." Task Force 77's assignment to provide close air support ended in September, by which time the battle line had been stabilized by UN forces in a series of small battles fought at approximately the 38th Parallel.

UN Secretary General Trygve Lie stated on July 1, 1951 that the Security Council would consider the resolutions passed a year earlier fulfilled if a final ceasefire could be achieved between communist and UN forces on a line roughly at the 38th Parallel. Testifying before the Senate Armed Services Committee on June 7, Secretary of State Acheson publicly stated UN forces would accept an armistice on the 38th Parallel. On June 23, Soviet UN Ambassador Jacob Malik responded by officially proposing a ceasefire in Korea on the 38th Parallel. Events moved quickly, with the first meeting to open negotiations between communist and UN delegations at Kaesong occurring on July 10.

Admiral Turner C. Joy led the UN negotiators. The assistant chief of the UN team was newly promoted Rear Admiral, and future CNO, Arleigh "31-Knot" Burke, former chief of staff to Admiral Marc Mitscher in World War II.

In the meantime, the war went on for the reservists of Air Group 101. By now it was finally summer in the Sea of Japan, and better weather conditions prevailed. Operations began at a high level and would continue throughout this third tour. The first loss came three days into the tour when a VF-791 Corsair flown by Lt (jg) P. L. Schaefer was hit by antiaircraft fire over the coastal transportation hub of Songjin that was the mission's target. Schaefer ditched three miles south of the target, but did not get out of the airplane, which quickly sank. The next day, Lt D. A. Arrivee, commander of the VA-35 night attack detachment, was shot down in his AD-2N, which caught fire and exploded when it struck the ground, taking his two enlisted electronics operators in the explosion. The next day, Ensign Marvin D. Nelson's VC-3 F4U-5NL was hit by flak over Wonsan. Nelson parachuted into Wonsan Bay, where he was rescued by a SAR "Horse" from LST-799, which was positioned near Yo-Do Island in the bay to provide rescue capability. A week later, Lt (jg) O. G. Droege's VF-884 Corsair was hit by flak just north of the front lines while he flew close air support. Droege was rescued from behind enemy lines by the HO3S-1 from the heavy cruiser USS *Los Angeles* (CA-135).

July saw operations continue, though the East Asian monsoon had finally arrived with low clouds that would hamper operations after June's clear skies. USS *Toledo* (CA-133) sent a helicopter to pick up

VA-702's Lt R. T. Walker on July 2 after flak put his engine out north of Wonsan. July 3–5, the one-year anniversary of Task Force 77's entry into the Korean War with the Pyongyang strikes that had reaffirmed the effectiveness of naval aviation, saw the task force's carriers on stand-down due to bad weather. *Boxer*'s airmen set another record of 133 sorties on July 6 when Air Group 101 and *Bon Homme Richard*'s Air Group 102 struck Wonsan in a series of attacks that began at dawn and lasted till dusk. The next day, a Corsair suffered a power failure on takeoff and went into the water. The pilot was injured in the crash and only barely got out before the F4U-4 sank. *Boxer*'s "Horse" was immediately overhead, but the pilot had difficulty getting into the rescue sling, and the rescue crewman had to jump in to help. In the end, both men were picked up by a whaleboat from USS *Mason* (DD-852). The event proved once again that there were no "milk runs" in naval aviation.

LST-799, the Yo-Do Island helicopter scow, was again responsible for the rescue of a *Boxer* pilot when VF-884's Lt (jg) W. F. Wallace's F4U-4 was hit by flak on July 11; he ditched in Wonsan Harbor and was promptly pulled out of the water by the "Horse" that was standing by as he touched down. The pilot and two crewmen of a VC-35 AD-4N were incredibly lucky that evening when they suffered engine failure on takeoff and went into the water near the escorting USS *Craig* (DD-885). The two electronics operators were in a small cabin in the Skyraider's fuselage right over the trailing edge of the wing, which was accessible by small hatches on either side that were notoriously difficult to get through in an emergency wearing flight gear when seconds mattered, but the plane stayed afloat just long enough for both to join the pilot in the water. *Boxer*'s "Horse" had one crewman back aboard the carrier within five minutes and the pilot three minutes later, while *Craig*'s whaleboat rescue crew snagged the second crewman. Four days later, *Boxer*'s third tour ended and the carrier departed for R&R in Yokosuka after launching 1,992 sorties, divided about half and half between battlefield close air support and rear area interdiction. Air Group 102 had paid a high price during this second tour: nine aircraft were lost to flak, with three pilots killed, three injured, and one missing in action.

Boxer returned to combat on July 27. By this time, the battle lines were mostly solidly dug in along the MLR (Main Line of Resistance) and the majority of missions for the fourth tour would be interdiction strikes in the rear area. By this point in the cruise, the Corsairs were definitely the worse for wear. The airplanes had been delivered from other squadrons to begin with, and were increasingly subject to mechanical failure due to the engines being in need of overhaul and replacement. During the trip from Yokosuka to the Sea of Japan, a Corsair went down due to loss of oil pressure while returning from a training flight. Fortunately, the pilot was able to get out and was quickly rescued by helicopter. *Boxer* replaced *Bon Homme Richard* in the task force and operated once again with *Princeton*.

July 28 saw the air group return to combat with successful rail strikes. That night, VC-3's Lt (jg) H. F. O'Hara misjudged the LSO's cut and his F4U-5NL was destroyed when it hit the ramp, though O'Hara was able to get out successfully. Bad weather shut down operations until August 5, when another aging F4U-4 lost power on takeoff and crashed into the ocean. This time, Lt (jg) H. B. Rathbone was unable to get out before the Corsair went down. On August 6, VF-721's Lt S. M. Rines logged *Boxer*'s 45,000th landing while 98 sorties were flown in the Wonsan area. The next day, the heavy cruiser *Toledo*'s helicopter rescued another CVG-101 pilot when Lt R. T. Walker was forced to ditch his Skyraider in Wonsan Harbor.

On August 9, a returning VF-721 Panther pilot reported he was unable to lower his tailhook. After he had burned fuel to a minimum, the numbers 2, 4 and 5 barriers were rigged, and a barricade of five tractors was placed across the deck 50 feet past the number 5 barrier, for a no-hook landing. When the LSO signaled the cut, the pilot pulled back on the stick and hit the deck in a nose-high attitude. The jet then bounced over the number 2 barrier, assuming a nose-low attitude while the number 4 barrier snagged the main gear and snapped them both off. The plane then slid down the deck, where the 20mm cannon barrels snagged the number 5 barrier and the barrier caught the nosewheel, which held until the plane went into the barricade of tractors, at which point the nose gear collapsed and the barrier held the plane. Amazingly, only one of the tractors suffered minor damage. Other aircraft ahead were unharmed. As a result of this accident, Panther pilots were ordered to lower their tailhooks as they crossed the shoreline returning from a strike, or 20 minutes prior to being relieved on CAP. This would give the pilot time to divert to an airfield in South Korea if the tailhook failed to deploy.

The next day, *Princeton* departed the task force on the arrival of *Bon Homme Richard* from Yokosuka, to return to the United States. *Princeton* had arrived in the middle of the Chosin disaster nine months earlier, and had held the line successfully since then, setting several records in the course of a record 12 tours on station that included operating two different air groups. After ten days of interdiction missions broken twice by withdrawals for underway replenishment, *Bonnie Dick* and *Boxer* were forced to flee northeast into the Sea of Japan on August 20 to evade Typhoon Marge. Bad weather due to the typhoon limited operations for two days. On August 24, the task force moved north and air groups 101 and 102 flew strikes along the Yalu in concert with USAF level bombers, hitting targets at Rashin and Najiin, with following strikes against the bridges at Chongjin. While Air Group 101's losses were comparatively light, *Bonnie Dick*'s fliers again suffered high casualties, losing 11 aircraft, with three pilots killed and four injured, while four escaped injury in crash landings while trying to bring their damaged planes aboard.

The morning of September 5, *Boxer* moved back to station off Korea to complete what turned out to be the final tour of her second Korean deployment. The next day, their first back on the line, Air Group 101 flew 101 sorties against transportation targets. On September 7, the targets were bridges, with ten reported knocked out with 107 sorties flown. Unfortunately, everyone knew how good the enemy was by now at repairing bomb damage and knew they would be returning to these targets. One flak-damaged Skyraider failed to engage an arresting wire and went into the barrier, but caused no further damage. The next day, a VF-884 Corsair returning from a strike was only able to lower the right main gear. After waiting for the other aircraft, the pilot came aboard successfully and walked away from the crash landing.

September 18 saw the loss of VF-884's Lt (jg) Podorson when his Corsair was hit while dive-bombing a bridge and went straight in to explode. Lieutenant R. N. Pitner's Corsair was also hit on this strike and he was forced to land ashore at the Marines' K-18 airfield, where the aircraft was declared a write-off due to the severe flak damage. On a separate mission, one of the now-elderly Corsairs went in on takeoff due to loss of engine power; fortunately, the helicopter was able to pull the pilot from the sea. The next day, VA-702's Lt (jg) P. M. Fant owed his life to the sailors of HMAS *Anzac* when he ditched his Skyraider ten miles offshore while attempting to return to the ship after being hit over another of the detested bridges.

On September 20, VA-702's exec, Lt Cdr E. W. Rosson, was forced to crashland in North Korea. Corsairs and Skyraiders from *Boxer* and *Bon Homme Richard* remained overhead as RESCAP for two and a half hours until the HO3S-1 from LST-799 was able to arrive and effect a pickup. Finally, on September 27, the interminable days of one strike after another against roads and bridges and supply dumps came to an end with several days of bad weather that was welcomed by the pilots.

Good weather returned on October 1, however, and the missions continued. On October 2, VF-791's XO, Lt Cdr Sturdivant, was hit by flak while attacking a rail line outside Wonsan. His engine failed over Wonsan Harbor and he made a successful water landing, to be picked up by the whaleboat of USS *Shields* (DD-596). Sturdivant's adventure wrote *finis* to Air Group 101's tour. That evening, *Boxer*, in company with the cruiser *Toledo* and destroyers *Keyes*, *Eversole* and *Shelton*, left station headed for Yokosuka before steaming on to the United States. The carrier arrived in Yokosuka on October 5 and offloaded aircraft to NAS Atsugi, to be put into the fleet replacement pool after overhaul.

The West Pacific deployment of the first reserve air group to see combat in Korea had been a resounding success. On their final tour, the group had flown 532 jet sorties and 1,351 Corsair and Skyraider sorties.

With *Boxer*'s departure, *Bonnie Dick*'s Reserve Air Group 102 was joined by the newly arrived *Antietam*'s Air Group 15, which included reserve squadrons VF-831 with F9F-2 Panthers and VF-837 flying F9F-2Bs, VF-713 with F4U-4s, and VA-728 equipped with Skyraiders. *Bonnie Dick*'s fliers had flown 1,119 offensive sorties between September 19 and October 18. The targets were rail lines, marshaling yards and rolling stock in the Hungnam, Paegan-Dan, Wonsan, Onyand-Ni, Kowan, Yangdok and Tangchong areas. October 9 had seen the Corsairs and Skyraiders attack a mining center 35 miles from Songjin. While the Corsairs dropped napalm on AA emplacements, the Skyraiders dropped 2,000lb bombs that wrecked the ore plants and damaged 31 buildings. During this fourth tour, six aircraft were lost, but only one pilot was lost, with the other five picked up by helicopter.

Bon Homme Richard returned to the line on October 31 for her fifth and final tour, which would be the longest of the deployment. Over the next 30 days, with the weather becoming increasingly bad in the face of the onset of winter, 924 sorties were flown, during which eight aircraft were lost; three crashed near the targets after being hit by flak, and one shot-up Corsair managed to crashland on a field ashore. The other four were the victims of mechanical trouble.

On November 9, four supply trains were spotted. All three propeller squadrons were launched to go after them. The rail lines were broken ahead and behind the trains, after which the Corsairs and Skyraiders went to work. Four locomotives and 18 railroad cars were destroyed, while three locomotives and eight rail cars were damaged. At another location, one locomotive, three rail cars and seven trucks were destroyed. The day was recorded as "a dream day for the Allies and a nightmare for the enemy."

Throughout the tour, *Bonnie Dick* ranged the coast from Wonsan to Songjin, with primary strike emphasis going to cutting rail lines and going after trains. By November 21, Typhoon Wanda was building, and the weather went bad for three days as the storm passed. The weather broke for the better on November 24 and strikes continued. On November 27, a flight of five Corsairs and three Skyraiders was intercepted northwest of Wonsan by two MiG-15s. It was unusual to find the communist jets this far south. The MiGs made three runs on the formation and damaged one Skyraider. The Corsairs fired at the enemy without success.

Finally, on November 29, *Bon Homme Richard* departed the task force in company with the cruiser *Los Angeles* and the destroyers USS *Wedderburn* (DD-684) and *Hopewell* (DD-631) to stop at Yokosuka on the way back to the United States.

The organized reserves were not the only reservists involved in the fighting. In fact, the unorganized reserves would provide a pool of manpower to "flesh out" fleet squadrons throughout the war. The first reservist to be awarded the Medal of Honor during the war was Lt (jg) John Kelvin Koelsch, the first helicopter rescue pilot to be so honored. During World War II, Koelsch had left his studies at Princeton to join the Navy, where he became a torpedo bomber pilot after winning his Wings of Gold in early 1944. Following the war, he returned to the school and graduated in 1949 with a degree in English Literature and plans to enter law school. His studies were interrupted by his call-up to active duty in July 1950, where he volunteered to train as a helicopter pilot. By the fall of 1950, he reported aboard *Princeton* as officer-in-charge of the HU-1 detachment, flying the ship's HO3S-1. During her epic tour, Koelsch made many successful rescues.

When the ship departed to return to the United States in June 1951, he volunteered to remain in Korea, and took an assignment flying rescue missions behind enemy lines from the Yo-Do Island LST at Wonsan. Late in the afternoon of July 3, 1951, word was received that Marine Captain James V. Wilkins of VMF-312 had been shot down. Bailing out of his burning Corsair, Wilkins was able to evade North Korean troops in the area, even though his legs had been badly burned.

Despite the distance to the crash and the fact that he would arrive after dark, Koelsch volunteered for the mission, along with his crewman, AM3 George Neal. Dusk was approaching, and a low ceiling and fog prevented the RESCAP fighters from giving cover when Koelsch entered the valley and spotted the crashed airplane. As he approached the wreckage and spotted Wilkins, enemy troops opened fire. Koelsch brought the Horse in low over Wilkins and Neal deployed the sling. Wilkins later stated that "it was the greatest display of guts I ever saw." Wilkins slipped it on and Neal started raising him when a burst of enemy machine-gun fire hit the engine and the helicopter crashed to the ground where it caught fire.

Koelsch got out of the burning helicopter and managed to pull Neal and Wilkins to safety. Under his leadership, the three evaded capture for the next three days, at which point Koelsch led a march to the coast, which was slowed by the injuries suffered by Neal and Wilkins. After six days, they reached a coastal village where they were betrayed by local Koreans and captured the following day while hiding in a hut.

Once in the prisoner-of-war camp, Koelsch refused to cooperate with the communists though he was badly beaten. He found ways to steal medicine and food, which ensured the survival of Neal and Wilkins and other prisoners while inspiring them by his example. That October, he fell ill with dysentery as a result of malnutrition and died on October 16. Both Neal and Wilkins survived to be repatriated following the end of the war in 1953. On August 3, 1955, Lt (jg) Koelsch was awarded the Medal of Honor posthumously for his act to rescue Wilkins and his leadership as a POW.

Essex's Air Group 5 had a reservist ensign assigned to VF-51 who would show his mettle during the deployment when he displayed unusual coolness in a difficult situation, something he would do again and again in an aviation career that would see him become one of the greatest pilots in history.

Born August 5, 1930 on a farm near Wapakoneta, Ohio, the eldest of three, Neil Alden Armstrong fell in love with flying when he took his first ride with his father on July 20, 1936 in an old Ford Trimotor. On his 14th birthday, he took his first flying lesson and soloed on his 16th birthday; he earned his pilot's license before he obtained a driver's license. Following graduation from high school, he entered Purdue University to study aeronautical engineering through the Navy's V-5 Aviation Midshipman reserve program, known as the Holloway Program; this involved study for two years, followed by two years of flight training and a year of active duty as an aviator, with completion of the bachelor's degree following the active service.

On January 20, 1949, Armstrong was called to active duty, reporting to NAS Pensacola for 18 months of flight training, during which he qualified as a carrier aviator aboard USS *Cabot* (CVL-28) on August 16, 1950, two weeks past his 20th birthday. After initial service in Fleet Aircraft Service Squadron 7 at NAS North Island, he was assigned to VF-51 in December 1950 when Air Group 5 returned from their first deployment to Korea. He first flew an F9F-2 on January 5, 1951. The youngest and most junior member of the squadron, he quickly gained a reputation as a serious student of aviation. In June 1951, he made his first jet landing aboard *Essex* and was promoted from Midshipman to Ensign that month.

Essex and Air Group 5 departed for Korea at the end of June. Once on station in the Sea of Japan, operations began quickly and Armstrong flew his first mission as escort to a VC-61 F9F-2P over Songjin on August 29. Five days later, on September 3, he flew his seventh mission, an armed reconnaissance over transportation and storage facilities south of the village of Majon-ni, west of Wonsan. Air Intelligence called the area "Green Six," code name for a valley filled with antiaircraft positions, freight yards, trains, a dam and a bridge; their targets would be anything they saw moving. Ensign Armstrong was assigned to fly as wingman to division leader Major John Carpenter, a USAF exchange pilot.

Once in Green Six, Carpenter spotted traffic on the bridge and the Panthers attacked. Flak filled the sky, but everyone got through the run. Carpenter looked back and saw the target was not destroyed and called for a second run. Following Carpenter, Armstrong dropped his second 500lb bomb. As he pulled up from the run, he suddenly saw an antiaircraft cable in front of him. When he hit the cable, the shockwave shook the airplane violently. As he later recalled, "If you're going fast, a cable will make a very good knife." The cable wrapped around his right wing, cutting metal, tubing, wiring and control connections. An instant later, six feet of his outer right wing flew into the air.

Armstrong was at an altitude of approximately 500 feet above the ground, with an air speed of 350 knots. As long as he held his left aileron at full down deflection, the damaged Panther stayed in the air with the left wing low. It was a dangerous situation, with the airplane only marginally controllable, as the cable had also damaged his right horizontal stabilizer and the elevator control was sluggish. The nose went down and the Panther dived toward earth. With lagging elevators, he had only the trim tabs with which to effect control. Slowly, the nose came up. Just 20 feet above the ground, the plane began to climb, still making 350 knots. Testing control, he found he could not slow much below 250 knots without the Panther entering a roll. He called to Carpenter and informed him of his condition. Carpenter broke off from the others and was quickly alongside Armstrong's airplane.

The two soon determined there was no way Armstrong could land back aboard *Essex*, because he couldn't slow to landing speed. The two Panthers slowly gained altitude as they headed south toward the 38th Parallel. Carpenter later said that he didn't see how Armstrong was able to keep control of the badly damaged airplane that had lost nearly half its right wing. Armstrong dumped the fuel from his left wingtip tank in an attempt to reduce weight on that side and keep the airplane as close to balanced as he could.

Finally, they were in the vicinity of the Marine K-3 airfield on the coast at Pohang and had climbed to 14,000 feet. Carpenter talked Armstrong through the ejection procedure. Armstrong elected to eject just offshore. Slowing to 250 knots, he put the Panther in a slow climb, the best position for ejection, and blew the canopy. He positioned his body in the seat and pulled down the face curtain above his head. The seat worked perfectly, and moments later he released his harness, fell out of the seat and pulled the D-ring on his parachute.

The wind caught the parachute and Armstrong drifted ashore near K-3. He finally touched down in a rice paddy, losing his helmet in the process. By the time he had shucked out of his parachute harness, he saw a jeep driving toward him. Amazingly, the driver turned out to be Marine 2nd Lt Goodell Warren, with whom Armstrong had gone through flight training at Pensacola. After being checked by the Marines' flight surgeon and staying at Pohang overnight, *Essex* sent her helicopter in the next morning to return him to the carrier.

Armstrong soon returned to flight operations and flew an additional 73 missions over North Korea, for a total of 78 missions and 121 combat hours by the time *Essex* completed her tour and returned to the United States in March 1952. That June, he was released from active duty and returned to school, completing his degree in 1955. Eighteen years after a young ensign flew an airplane missing half a wing 120 miles to safety, Neil Armstrong was 100 feet above the surface of the lunar Sea of Tranquility when he realized the automatic landing system would land the spacecraft in a field of boulders. Taking manual control, he flew the lander 150 yards to a clear area and then landed on the moon with 20 seconds of fuel remaining. No one who heard him calmly report "Houston, Tranquility Base here. The Eagle has landed," could have guessed he had just performed the most high-stress event of any of the Apollo landings.

CHAPTER 12

OPERATION *STRANGLE*

The commencement of Korean armistice talks in the summer of 1951 dominated the news in the United States and the planning of the armed forces in Korea. The talks at Kaesong appeared to promise an imminent end to the fighting and a return to diplomatic efforts. However, the first few days of negotiations were not auspicious, dominated as they were by efforts on the part of the UN delegation to limit communist propaganda activity regarding the nature of the negotiations, by disagreement regarding the administration of the neutral area around the site, and by arguments over how to proceed. However, over the course of a bit more than two weeks, the two sides managed to adopt an agenda that allowed the delegates to address the question of a ceasefire.

General Ridgway suspended negotiations in early August to protest at communist violations of the neutral zone. In late August, the communists fabricated an incident to "prove" that UN aircraft had bombed Kaesong and then in turn suspended further negotiations. Finally, in late October, the negotiations were transferred to Panmunjom. By November, it appeared both sides were willing to consider the existing battle line, which was more or less roughly along the 38th Parallel, as the armistice line. There was hope that the talks could reach a successful conclusion quickly. This hope was dashed when the issue of returning prisoners of war came up. The UN side knew what had happened to Soviet POWs who were returned to the USSR at the end of World War II, where most of them ended in the gulag or were executed. The UN forces were dead set against forced repatriation, while the communists would accept nothing less, since the spectacle of their own soldiers and citizens refusing to return to the "worker's paradises" was more than they could stand in the court of world public opinion in the Cold War. This issue would stymie further negotiations for the next 21 months.

Even so, ground action diminished. The six months of grinding front line warfare since the Chinese had expelled UN forces from North Korea had ended in June and the battle line was now stabilized on ground favorable for defense by UN forces. Other than in the Iron Triangle and on the Soyang River, UN ground activity was limited to patrolling the area between the armies and the improvement of defensive positions. However, the enemy was bringing new units into the battle line to replace those that had been chewed up in the spring offensives. Interdiction of troop movements and the attendant enemy effort to increase supplies on hand for the front line forces continued on the part of FEAF and Task Force 77. Over the next two years of lengthy negotiations, with the continuing frustration of hopes for peace, what UN offensive action there was would be the work of the US Air Force and the US Navy.

In September 1951, the carriers of Task Force 77 were relieved of responsibility for close air support over the Main Line of Resistance and were assigned full-time to Operation *Strangle*, the air campaign created in December 1950 to reduce supplies to the communist armies. Until the end of the war, the carriers and their planes would engage in a futile search to find the target that James Michener's character "Admiral Tarrant" described in *The Bridges at Toko-ri*:

> I believe without question that some morning a bunch of communist generals and commissars will be holding a meeting to discuss the future of the war. And a messenger will run in with news that the Americans have knocked out even the bridges at Toko-ri. And that little thing will convince the Reds that we'll never stop, never give in, never weaken in our purpose.

As had been first demonstrated in the Battle of Carlson's Canyon, the enemy was very adept at keeping his facilities operational despite repeated air attacks. The greatest surprise of the Korean War would be the demonstration of the limited effectiveness of "air power" in bringing about the desired political result. Despite nearly total air superiority during the first six months of the war, air power had been unable to prevent battlefield reverses, isolate the battlefield or detect the large-scale movement of enemy forces as the People's Volunteer Army entered North Korea. Air power had been stretched to its limits in defending the Pusan Perimeter. The Chinese intervention in November had not been stopped by bombing, though tactical air power had kept the Chinese forces at a sufficient arm's length to allow the Marines to escape the Chosin Reservoir with their basic fighting force intact. Between September 1951 and July 1953, the aviators of Task Force 77 would hit many targets repeatedly as they fought the never-ending battle to keep targets out of action in spite of enemy repair activity in an effort at interdiction that would not achieve full success.

Due to the geography of North Korea, the carrier task force would assume responsibility for all operations in the northeastern part of the country since Air Force fighter-bombers based in South Korea did not have the range to strike those targets, while the carriers could move up and down the peninsula offshore in the Sea of Japan at will.

On August 12, 1951, USS *Essex* (CV-9), which had been withdrawn from the mothball fleet a year earlier, arrived on station, bringing Air Group 5 back for their second Korean tour. She was the first fleet carrier to arrive in Korea following a modernization that gave her more powerful catapults, larger elevators for planes and bombs, and the most important change – a larger aviation gasoline capacity to meet the demands of jet aircraft, with an improved fueling system that allowed faster fueling of aircraft. VF-52's F9F-2 Panthers had been replaced in the air group by VF-172, which flew the McDonnell F2H-2 Banshee on that type's first wartime deployment.

One of the most spectacular missions flown by Air Group 5 occurred on October 30. The day before, TF 77 had received a report from Eighth Army's Joint Advisory Commission Korea (JACK), which was responsible for providing important target intelligence from guerillas in North Korea, that a meeting of top North Korean and Chinese communist leaders would take place in the village of Kapsan at 0900 hours on this date. The village was located in a valley on the Hoch'on River, high in the desolate mountains of northeastern North Korea. The decision was made to hit the village and hopefully kill top-level decision-makers.

At 0730 hours, *Essex* launched eight Skyraiders of VF-54 led by their CO, Cdr Paul Gray, whose callsign was "Snow White," while the others used the names of the seven dwarfs. A photo-recon mission the previous day had identified the specific buildings where the meetings were being held, which were Gray's targets. Each bomber carried two 1,000lb bombs, one set to explode on impact with the ground and the other with a proximity fuse set to explode ten feet above ground to take out antiaircraft gunners with shrapnel, along with a napalm tank on the aircraft's centerline and eight 260lb fragmentation bombs. Gray's Skyraiders were escorted by four F2H-2 Banshees from VF-172 and eight F4U-4 Corsairs from VF-53. *Antietam* launched four VF-831 F9F-2s, eight F4U-4s from VF-713, and VA-728 contributed eight more Skyraiders.

The strike force flew low, under North Korean radar. At 0913 hours, they climbed to 8,000 feet over the ridgeline just before reaching Kapsan. The VF-54 attackers were met with intense antiaircraft fire, but the proximity-fused bombs reduced defensive fire somewhat. Gray's force made a second dive, dropping the impact-fused bombs, returning to drop napalm, then strafing as they dropped their fragmentation bombs on the meeting site. The other attackers worked over the rest of village. At 0940 hours, they departed to return to the ships, having suffered no losses.

On November 2, JACK notified TF 77 that the strike had killed 500 of those attending the conference, and destroyed all the records of the Korean Worker's Party, with the village reduced to "a smoking pile of rubble." North Korean radio subsequently identified the VF-54 attackers as "The Butchers of Kapsan." Unfortunately, the raid was the last act of JACK, as communist forces hunted down and killed the guerillas over the month of November.

At the end of October, famed Pulitzer Prize-winning author James A. Michener, on assignment from *Reader's Digest* magazine to write an article about the differences for the Navy between the war in Korea and the war he had served in six years earlier and chronicled in his best-selling *Tales of the South Pacific*, the musical adaptation of which was in its second smash year on Broadway and soon to become a motion picture, would come aboard *Essex* and spend six weeks observing her fliers in action and talking to them, which was followed by an additional six weeks in February and March 1952 that the author spent aboard *Valley Forge*. No one knew at the time that this visit would result in the most famous novel to come from the Korean War, and perhaps the most famous story of naval aviation ever, *The Bridges at Toko-ri*.

The evening *Essex* arrived, *Boxer* departed for Yokosuka. While she was gone, *Essex* deployed her new Banshees in an unexpected role. The F2H had a higher operational ceiling than the F9F, and thus *Essex* CAG Commander Marshall U. Beebe led 12 Banshees as top cover escort with 11 F9Fs as close escort when 35 B-29 Superfortresses bombed Najin on August 25, an important storage center on the northeast coast that lay beyond the range of Air Force fighters and was only 17 miles from the Korea–USSR border. The MiGs failed to make an appearance, thus depriving the Banshee of its one opportunity to engage in air-to-air combat during the war.

Throughout the month, operations continued in three-day bursts of activity, followed by a day of underway replenishment. Transportation targets were the priority. On September 16, a damaged F2H-2 coming aboard *Essex* failed to engage an arresting wire, floating over the barriers and into aircraft parked forward, causing a gasoline fire that burned through the day before it was brought under control. Four aircraft were destroyed, seven crewmen were killed and 27 injured. *Boxer*'s helicopter rescued an *Essex* crewman who had been forced overboard by the fire. Four of *Essex*'s Panthers and two of her Banshees were brought aboard *Boxer* while the fire raged.

September saw the task force ordered to concentrate on destruction of railroad tracks and rail bridges in hope this would force the enemy to turn to less-capable motor transport. This was made more difficult by the fact that the communists had brought in large-caliber antiaircraft weapons from Manchuria and positioned them at strategic targets throughout the country.

In October, *Antietam* arrived and relieved *Boxer* to return to the United States. Named for the bloodiest single day's battle in the Civil War, *Antietam* (called *Sharpsburg* by Southern-born aviators in memory of the Confederacy's name for the battle) had been commissioned in January 1945, and was on her way to the western Pacific that August to participate in the final struggle against Japan, which was made moot by the Japanese surrender on August 15, 1945. Following the end of the war, the ship had remained in the Far East until early 1949, during which time her air group supported the Allied occupation of North China, Manchuria, and Korea as well as conducting surveillance missions in the region following the resumption of the Chinese Civil War that finally saw communist victory in October 1949.

By that time, *Antietam* had been decommissioned on June 21, 1949 and was in the reserve fleet.

Following the outbreak of war in the summer of 1950, the carrier had been taken out of the reserve fleet and was recommissioned on January 17, 1951. With the reserve squadrons of Air Group 15 aboard, she departed San Diego on September 8 for the only combat deployment of her career.

The addition of new antiaircraft defenses brought about tactical changes in the way the air groups attacked these rail targets. Where previously targets were assigned to one squadron – jet or prop, depending on the target – these high-value targets were now attacked by the entire air group in a coordinated strike. Panthers were utilized to attack gun positions ahead of the Corsairs and Skyraiders, while the Corsairs were assigned to keeping the gunners' heads down while the Skyraiders dropped their heavy bombs on the target. Bombs of 1,000lb and 2,000lb size, which could only be carried by the Skyraiders, were best for knocking down bridges. The new tactic reduced losses while still ensuring these targets were destroyed.

VF-51's Lt Ken C. Cramer recalled:

> The concept that made the first coordinated strike so successful was the use of jets – F9Fs and F2Hs – in conjunction with the Skyraiders and Corsairs. That hadn't been done before because the jets operated to a totally different schedule than the prop planes. We didn't have air-to-air refueling, so a jet mission would last only 90 minutes, whereas the props could remain airborne for at least four hours. Scheduling this kind of coordinated attack required an enormous amount of detailed planning so that the three squadrons would arrive simultaneously.

Because the Panthers were underpowered, they carried four 260lb fragmentation bombs or 250lb high-explosive bombs for this work. Where previously they had made multiple attacks, dropping one bomb per pass, they now made one pass in which they released all four bombs, to limit their exposure to flak.

Since all squadrons were to arrive over the target simultaneously, the propeller aircraft were launched before the faster jets. The slow Skyraiders were deck-launched first, followed by the Corsairs, with the jets then launched from the catapults. Such a coordinated strike employed two to three F9F divisions, depending on the number of guns known to be in place at the target.

On November 4, VF-831's Lt G. S. Brainard came aboard *Antietam*, but the Panther failed to catch a wire. The jet plunged through the barriers into aircraft parked ahead, killing Brainard and three flight deck crewmen. Amazingly, this would be the squadron's only loss on the entire deployment, which lasted until *Antietam* returned home in early May 1952. Sister squadron VF-837 only lost two Panthers; neither squadron suffered combat losses despite the high number of missions flown against difficult targets.

On November 29, *Valley Forge* arrived on station, returning for her third combat deployment to Korea.

Aboard *Valley Forge* was Air Task Group 1, composed of both reserve and fleet squadrons, which had been cobbled together to get around the requirement for congressional approval to form new carrier air groups. Among the squadrons in the group was Corsair-equipped VF-653, the only reserve squadron, which had been added to the fleet squadrons that made up the rest of the air group. The veteran VF-52 "Bitter Birds," which had served aboard "Happy Valley" during her first Korean deployment and been dropped from Air Group 5 to make way for Banshee-equipped VF-172, flew F9F-2B Panthers along with VF-111, which was making its second Korean deployment. Skyraider-equipped VF-194 constituted the attack squadron, while VF-653's 18 F4U-4Bs was the group's fighter-bomber squadron. VC-3's night-fighter detachment operated four F4U-5NLs. VC-35's night attack detachment flew four AD-4NLs and two AD-2Q electronic countermeasures Skyraiders. VC-11's three AD-4Ws provided airborne early warning radar control. The VC-61 detachment flew three F9F-2P Panthers and HU-2 provided the HO3S-1 rescue helicopter.

VF-653 drew its personnel from western Pennsylvania and Ohio. The squadron was notable in that its commander was the well-known air racer Lt Cdr Cook Cleland. Cleland had first flown in combat from USS *Wasp* (CV-7) during the Guadalcanal invasion and had survived her sinking in September 1942. A year later, as a member of VB-16 aboard USS *Lexington* (CV-16), he was involved in the Central Pacific campaign from the Gilberts invasion to the Battle of the Philippine Sea, where he was one of the last SBD Dauntless pilots to drop a bomb on an enemy ship during the "Mission Beyond Darkness." Cleland had won the Thompson trophy in 1947, the first year he flew one of his highly modified Goodyear F2G-2 Corsairs that were powered by the massive Pratt & Whitney R-4360 "corncob" radial, winning again in 1949 at the final National Air Races in "Race 94" and breaking his 1947 winning speed of 396mph by the then-record-winning speed for the Thompson Trophy races of 397mph.

Many of Cleland's reservist pilots were in their early 30s, married with young families started in the years after the war. Cleland's second section leader in his division was 29-year-old Lt Joe Sanko, a coal miner who had flown combat in the South Pacific and described Cleland as "a real pusher" in a letter written to his older Jesuit brother. The squadron's XO, Lt Cdr Ray Edinger, was a General Motors service representative. The others were mid-level white and blue-collar workers. The youngest was 26-year-old Bob Balser, one of the few unmarried pilots, who was an illustrator for the *Pittsburgh Post-Gazette*. The squadron pilots stood out from the others aboard *Valley Forge* due to their helmets, which were painted red with white polka-dots, with a grinning clown's face on either side created by illustrator Balser, a morale-building move on Cleland's part and a play on the derisive term "you clowns" applied to the reservists by the regulars in the other shipboard squadrons.

Cleland was a pilot who was not above getting his hands dirty when it came to keeping the squadron aircraft operational. Aviation Machinist's Mate Len DeFranco, who had been one of his mechanics at the air races, remembered a mission in which Cleland's Corsair returned to the ship after a low-level mission in which he had hit a high-tension wire, chewing up the cowling, prop, and right wing. "Number 301" was an early F4U-4 armed with three .50-caliber machine guns in each wing, but the only replacement wings available were for the cannon-armed F4U-4Bs the squadron also flew. DeFranco recalled, "A half-dozen of us worked all night to replace both wings, and Cook was right there with us lending a hand."

Valley Forge left Yokosuka for the Sea of Japan on December 7, 1951. The next day, VF-653 took its first losses in a tragic mid-air collision during a tactics training mission, in which lieutenants Don London, Sanko's roommate and close friend, and Jim Porterfield were lost when the planes spun into the water. The loss hurt the tightly bonded reservists, since London had recently become a father and Porterfield and his wife were expecting their first child's arrival in March 1952.

Operations began on December 12 with attacks against enemy rail transport north of Wonsan. On December 13, a night-attack Skyraider on a heckling mission flown by Lt (jg) Harry E. Ettinger was shot down; Ettinger, his radar operator Aviation Electronics Technician 3/c (AT3) Jess R. McNelroy and ECM operator AT2 Julian Gilliland were lost. However, as it transpired, Ettinger had survived being shot down and had been captured by North Koreans. He would be spirited from his prison camp by anticommunist North Korean guerillas in February 1952, which would galvanize an unsuccessful attempt to rescue him that would later inspire the ending of Michener's novel.

The next day a Corsair from VF-653 and a Skyraider from VF-194 were both hit by flak while attacking a railyard and were forced to divert to the primitive Marine K-18 airfield just south of the battle line at Kangnung. The second winter of the war was closing in. A scheduled underway replenishment on December 15 had to be carried over into the following day due to heavy weather making it difficult for the ships to hook up to the oiler *Ashtabula*. Shortly after the carrier returned to the line, VF-194's Lt Cdr Benjamin T. Pugh was lost when his Skyraider was hit by its own bomb blast on a low-level run. Pugh was able to ditch offshore, but the airplane sank before he could retrieve his raft. By the time a rescue launch got to him from Yo-Do Island, he had frozen to death in the cold sea.

Rail strikes continued, and VF-653 suffered their first combat loss on December 22 when Lt R. L. Sobey was hit by flak. Set afire, the Corsair disintegrated in mid-air before it hit the ground. The new year saw more rail and bridge strikes, with pilots now aware that the enemy could repair the destruction they wrought almost faster than they could knock a bridge back down or cut a rail line again. On January 9, Lt William Frankovitch was hit by flak while bombing a bridge 19 miles northwest of the village of Yodo-ri in the vicinity of Kowan. He became separated from his wingman and minutes later reported his Corsair had lost oil pressure as he crossed out of Korea to return to the ship. Only an oil slick was ever found.

While 17 of the 36 days of the tour experienced bad weather, good weather and a full moon on January 12 allowed the night-hecklers from the VC-3 and VC-35 detachments to start Operation *Moonlight*

Sonata in coordination with the night detachments from *Essex*. The plan was that ten Corsair and Skyraider flights would be launched at 0300 hours to take advantage of the clear winter nights that would allow the pilots to spot a train against the snowfields as they reflected the moonlight. During a three-hour mission, each two-plane section could cover around 75 miles of railroad track. *Valley Forge* and *Essex* flew the operation through January 16 when the weather again closed in. Though the operation was staged repeatedly on moonlit clear nights until March 1952, only five locomotives and their trains were spotted, and only two of the five were destroyed; interestingly enough, these two were destroyed on the first night of the operation by *Valley Forge*'s night flyers.

By the time *Valley Forge*'s first tour ended on January 19, 1952, VF-653 had lost two more pilots in addition to Porterfield and London out of ten pilots lost in the air group during 1,000 sorties that had been flown in mostly marginal winter weather. Enemy flak was becoming increasingly numerous and effective; during this tour, 16 Panthers, 16 day Corsairs and two night Corsairs, and 17 Skyraiders were damaged to varying degrees by enemy fire. VF-653 would complete four more tours before their carrier returned to the United States in June 1952, with 11 pilots killed or missing, and two so severely injured they were evacuated to Japan; the losses were 46 percent of the initial squadron complement and half the total casualties suffered by ATG-1 during a deployment in which *Valley Forge*'s nickname would change to "Death Valley."

In the meantime, *Essex* saw in the new year of 1952 off Korea, having returned for her fourth tour in the Sea of Japan on December 29, 1951 when she relieved *Antietam*, which departed for Yokosuka the next day.

Rear Admiral John Perry, ComCarDivOne aboard *Essex*, assumed control of TF-77. The winter weather in the Sea of Japan and over Korea made operating conditions difficult. On January 3, 1952, everyone aboard was reminded that there was no really "safe time" aboard a carrier at sea when a 20mm cannon in one of VF-172's Banshees accidentally discharged due to a broken breech block and air pressure loss. Five flight deck personnel were wounded, one critically, when the cannon shell struck a VF-51 Panther and exploded.

The enemy was not taking any new year's holiday. VF-51 lost Ensign J. H. Rickleton three days later when his F9F-2B was hit by flak while attacking the rail line and exploded on impact with the hillside. On January 8, a VA-55 Skyraider flown by Ensign R. G. Kelly was set afire by flak and exploded on impact. Three days later, Lt (jg) J. H. Gollner was lost when his Skyraider stalled and spun into the sea just after takeoff; the AD-3 sank immediately, taking the pilot down with it. On January 13, VF-53's Ensign E. R. Harris ditched his F4U-4B off the coast from Mayang-do after he was hit by flak while attacking a storage installation. Fortunately, he found USS *Porterfield* (DD-682) and put the Corsair down close to the destroyer, which picked him up within minutes. On January 15, VA-55's Lt (jg) F. J. Prendergast ditched his Skyraider in Wonsan Harbor, where he was picked up by a whaleboat from USS *Mackenzie* (DD-836). Air Group 5 received congratulations from ComNavFE for the destruction of heavily defended rail and highway bridges west of Yangdok between January 5 and 7 and the successful destruction of a train in a predawn strike by one of the VA-35 night hecklers on January 12.

On January 19, Air Force Major F. J. McCullum, an exchange pilot flying with VF-172, was lost when his Banshee was hit by AA and exploded on impact when it crashed.

On January 22 an F4U-4 from *Essex*'s VF-53 flown by Lt (jg) John Abbott was hit by flak over Hungnam. He attempted to get to Wonsan, but crashed short. The rescue mission was given to USS *Rochester* (CA-124). Her "Horse" was flown by Chief Naval Aviation Pilot Duane Thorin, the 216th Navy helicopter pilot, and a flier well versed and experienced in rescuing pilots, which he had accomplished successfully 130 times since first coming to Korea aboard *Philippine Sea* in 1950. He was known throughout Task Force 77 for the Kelly Green baseball hat he would put on once he had lifted off the cruiser and was free of the captain's sartorial restrictions, which had led to his dismissal from *Philippine Sea* in much the way that Michener's "Chief Forney" (who Thorin was said to have inspired) would be from the carrier he operated from. Thorin had brought HU-1's Detachment 13 aboard *Rochester* on November 23, 1951 when the cruiser *Toledo* he had previously operated from departed to return to the United States.

Thorin was a real "character" in naval aviation. Pinning on his enlisted NAP Wings of Silver (Wings of Gold being reserved for officers) in 1943, he had become a test pilot and was proficient in every airplane the Navy used during the war by the time it came to an end in 1945.

His crewmen idolized him. As one later recalled, "We were all in awe of him. He never had to give an order. We all thought he could have flown off the fantail without the aid of a helicopter."

Somehow, Abbott managed to survive in the icy winter waters despite being tangled in his parachute for the 20 minutes it took Thorin and his crewman, AMM2 Ernie LaRue Crawford, to get to him. Abbott was close to freezing to death and was unable to get into the sling on his own. Crawford went in to help. When he tried to cut away the parachute, he dropped the knife because his hands were now frozen. Thorin pulled Abbott out of the water with the parachute still attached, and flew him to Wonsan, leaving Crawford behind because he could not pull Abbot in from the sling alone.

While Crawford was in the water, VF-53 Lt (jg) Edward V. Laney, who was flying RESCAP, attempted to drop his life raft to him, but it caught on his stabilizer and he was forced to crashland on the beach. With North Koreans closing in, he swam out to Crawford. When Thorin returned, he first rescued Laney, who was able to get out of the sling and then pull Crawford inside when he was raised. Thorin and Crawford were each awarded the Navy Cross for this rescue.

At nearly the same time Abbott was being rescued, VA-55's CO, Cdr Paul N. Gray, ditched his Skyraider in Wonsan Harbor after being severely damaged by a flak hit. He was quickly picked up by the HO3S-1 operating from the Yo-Do helicopter scow, LST-799. Gray repeated this performance on January 30 when he experienced prop failure and ditched in Wonsan Harbor, where he was picked up this time by a whaleboat from USS *Twining* (DD-540).

Eventually, Gray would ditch five times in Wonsan Harbor, and his squadron mates would post a sign in their ready room: "Caution: When ditching in Wonsan Harbor, be careful not to hit Commander Gray!"

Air Group 5 experienced their final loss of the tour on January 26 when VF-51's Lt (jg) L. R. Cheshire's Panther crashed in Wonsan Harbor as he was attempting to ditch after being hit by flak on a rail-cutting mission.

By the end of 1951, it was clear that under the current rules of engagement, there was no "magic bullet" that might bring about an end to the war. Overall, since the adoption of the plan to hit rail transport in September, the efforts of Task Force 77 in the east, coupled with bombardment of coastal pressure points by the battleships and cruisers, had placed a heavy load on the enemy's transport system. However, the North Korean road and rail repair organizations had become increasingly competent at quickly repairing roads, rail lines and bridges. Despite a maximum effort on the part of the carriers, it was impossible to cut the flow of supplies below the enemy's requirements. This was due to the relatively small logistic requirements of the NKPA and the PVA. In fact, expenditure of artillery rounds by the communists had increased from 8,000 rounds per day in July 1951 at the end of the war of movement to 43,000 rounds per day by the end of the year. Additionally, communist troops on the front line were better fed than at any time previously. Coastal artillery emplacements had increased to the point that warships executing shore bombardment missions could no longer move in close or lie to while firing.

For the men of Task Force 77, 1952 promised more of the same.

CHAPTER 13

"DEATH VALLEY"

At the end of January 1952, correspondent James Michener reported aboard *Valley Forge*, having departed *Essex* at the conclusion of her December tour of operations with TF 77. "Happy Valley" was then at Yokosuka following the first tour of her third deployment to Korea. Michener was now writing for UPI and the *Saturday Evening Post* as well as *Reader's Digest*. Over the course of the next 45 days, during which time the operations would leave crew members calling their ship "Death Valley," he would find much to write about. Among the naval aviators he met on "Happy Valley" was Lt Donald Brubaker, a reservist flying Skyraiders with VF-194, who happened to be a lawyer from Denver, Colorado.

On February 1, *Valley Forge* relieved *Essex*. Operating with *Antietam* on her third tour, missions commenced immediately on February 2, with strikes flown against rail transportation and bridges. VC-11 detachment commander Lt Cdr W. H. Rogers and his two aircrewmen narrowly escaped injury in their AD-4W when the catapult ring broke during runup and the icy deck prevented full application of the plane's brakes. The plane made a power takeoff in only 137 feet of deck and actually touched the water, but managed to remain airborne and went on to complete the mission of Barrier CAP. VF-653's Lt P. P. Pierson's attempted deck run takeoff was aborted when his tailwheel caught in the Davis barrier and the Corsair ground looped on the flight deck. The accidents continued when Lt Richard Herman's VF-653 Corsair caught fire due to flak damage and he ditched within the approach pattern.

He was rescued by helicopter after several minutes in the icy water, suffering exposure, mild shock and minor burns to his face.

Losses continued the next day when VF-194's Lt (jg) N. J. Johnson's Skyraider was shot down just south of Hungnam. He managed to evade the searching enemy troops for 45 minutes until the HO3S-1 from LST-799 was able to rescue him. The Yo-Do "Horse" was busy again later, when VF-653's Lt R. S. Geffel was hit by flak over Hungnam but managed to stay airborne until he could ditch in Wonsan Harbor, where he was quickly picked up.

On February 4, *Philippine Sea* arrived on station to commence her second Korean deployment. Carrier Air Group 11 had previously served aboard in 1950. VF-111 was still equipped with F9F-2s, while VF-113 and 114 flew F4U-4 Corsairs and VA-115 operated their venerable Skyraiders. Three days after arrival on station, VA-115's Ensign J. D. Wolfe became the first casualty of the deployment when his Skyraider was shot down while attacking the rail line.

February 8, 1952 would be one of the worst days of the entire deployment for *Valley Forge*'s air group, and was the first time anyone made mention of the carrier as "Death Valley" rather than "Happy Valley."

Word had been received through US Army intelligence that VF-194's Lt (jg) Harry Ettinger, who had been thought lost on December 13, had instead been rescued from prison camp by anticommunist Korean guerillas who had kept him hidden in the mountains until an opportunity presented itself to attempt returning him to UN forces. Unfortunately, the party had been spotted and was now pursued by North Korean troops. On February 7, they radioed a request for a helicopter to pick up Ettinger, since they were unable to get past the many small villages near the coast.

On February 8, *Rochester*'s chopper pilot Chief Duane Thorin was dismayed when he met the commander of the Army Intelligence troops and was told he should take Army 1st Lt Albert W. C. Naylor-Foote with him to contact the guerillas. Thorin pointed out he couldn't take Naylor-Foote and Crawford and have room for Ettinger, and that Crawford was needed if they were to make an aerial rescue using the sling. When told they would land to pick up Ettinger, he relented, but then had another argument about the amount of medical supplies and a radio Naylor-Foote wanted to bring along for the guerillas.

At 0600 hours, shortly after dawn, Thorin lifted off *Rochester* and headed toward the coast. A six-plane RESCAP of three VF-194 Skyraiders and three VC-3 F4U-5N Corsairs from *Valley Forge* joined up as he crossed the shoreline at 10,000 feet. Dropping lower, he spotted the thatched-roof hut the guerillas had set afire to mark their location. Reconnoitering the fresh snow, he saw no other footprints in the area and came in to pick up Ettinger. As he did so, he spotted a North Korean patrol in a village; he estimated it would take them 30 minutes to get to the rescue site, enough time to pick up Ettinger and get away. Before going in for the pickup, he ordered Naylor-Foote to drop the 150lb of gear, since it would be impossible to rescue Ettinger otherwise.

Bringing the "Horse" in as close to the burning hut as possible, Thorin held it on the edge of a small terrace while Ettinger hobbled to them on his frostbitten feet. As he climbed aboard, the HO3S-1 dipped, dangerously out of balance since Naylor-Foote hadn't dropped the supplies. The helicopter was unable to maintain hover in this situation. As Thorin maneuvered to bring it around again, he moved out of "ground effect" where he had been hovering, and they crashed into the ravine below as the rotor blades caught the side of the ravine and shattered. Thorin called in the RESCAP and the planes strafed the North Korean patrol, which had left the village to investigate the burning hut. Thorin pulled Naylor-Foote and Ettinger from the wreck. "The explosive rounds sounded like popping corn, and shrapnel sizzled through the trees above us, close enough that I felt the breeze."

The North Koreans fired back and five of the six planes were hit. Lieutenant John McKenna's F4U-5N was set afire. He called that he was heading for open water, but fire soon spread to the cockpit. The Corsair sank quickly when it struck the ocean and McKenna was lost. Lieutenant Mel Schluter's Skyraider took hits, but he managed to stay airborne and reach the Marine airfield K-50 at Sokcho-ri. The other planes continued to circle the crash site and strafe the enemy as long as they could; finally, when they had exhausted their ammo and were too low on fuel to return to *Valley Forge*, they headed to K-18 at Kangnung. Shortly after their departure, as the North Koreans were closing in on the ditch where the helicopter lay, a flight of Corsairs from *Philippine Sea* that had been diverted from their armed reconnaissance mission arrived overhead and cut down the enemy soldiers with strafing runs. The Corsairs remained overhead.

Upon learning of Thorin's crash, LST-799 in Wonsan Harbor sent her helicopter to attempt a rescue. The helicopter was halfway there when it was struck by antiaircraft fire and damaged so badly it had to land on *Rochester*. There was no other immediate way to rescue the men, and a RESCAP was organized for the rest of the day while calls were made to see if another helicopter could be found.

While this was happening, *Valley Forge* launched the morning's scheduled strike against three bridges that crossed the deep river valley of Samdong-ni, which was close to the villages of Poko-ri and Toko-san; the names would later be combined by Michener for his fictional Toko-ri. VF-194's Lt Cdr Robert "Iron Pants" Schreiber led the eight Skyraiders, which were each carrying a 2,000lb bomb on the centerline station and a thousand-pounder on each inboard wing station.

The Samdong-ni valley was filled with antiaircraft guns. The attack plan was for the Panthers from VF-52 and 111 to attack the guns first, while VF-653 Corsairs would bomb the positions to keep the gunners' heads down when the Skyraiders made their attack. Schreiber would lead the first division in, while Lt Bob Komoroff led the second. Among Komoroff's pilots, Ensign Marvin Broomhead was "tail end Charlie." Schreiber's wingman, Lt (jg) Richard Kaufman, later recalled: "We had no illusions as to what we were in for. I was very uncomfortable, knowing from the radio that the rescue helicopter from the *Rochester* was in trouble and unable to help us."

Schreiber's Skyraiders arrived over Samdong-ni to find that the Panthers had attacked too early, thus alerting the gunners below. Kaufman remembered:

> They were waiting for us. We spread out in a loose tailgate racetrack pattern 12,000 feet above the bridges, so as to attack out of the sun. We were to drop the centerline two-thousand pounder and the two thousand pounders on the wing stations on the first run, saving the 250-pounders we carried on the wings if it was necessary to make a second attack.

As he followed Schreiber's plane on its bomb run, the snowy white valley erupted with gun flashes. "All hell broke loose," Kaufman remembered. "In my thirty missions over North Korea thus far, it was the heaviest flak I had ever seen."

Kaufman was a thousand feet behind his leader.

> I descended into the valley in a 60-degree dive, dive brakes extended to stabilize at 280 knots at the release point. We went in so low that the guns on the hilltops were shooting down at us. I really didn't have time to concern myself with the flak tracers and bursts all around me. Accelerating to 360 knots at full power at 1,000 feet and 4 Gs on the pullout was our plan to get through.

Miraculously, they came out of the valley untouched. Schreiber looked back and saw that only two of the bridges were down. They would have to do it again.

Kaufman fired his cannon for flak suppression as he followed Schreiber and pickled his eight 250lb bombs with Komoroff right behind. With so many 250-pounders on the one bridge, smoke and dust were thick. Looking back, Kaufman could not immediately see the damage, but did see Broomhead's Skyraider flying eastward down the valley with smoke streaming behind.

Broomhead had been grazed in his head by shrapnel, and his Skyraider had been hit in the engine and didn't have the power to climb. "I'm hit," he radioed. "I'm losing rpms." Schreiber ordered him to bail out. "I'm already too low. I have to find some place to set down."

Kaufman and the others followed Broomhead for ten miles before he spotted a snow-covered mountaintop clearing and crashlanded. Kaufman remembered, "The crash was sudden in a flurry of snow as he hit and skidded to a stop in about 300 feet. The engine broke off but there was no fire. All was quiet." Broomhead had fractured his back and broken both ankles in the crash. He finally managed to drag himself out of the cockpit. "As I buzzed over him on a go-around circle, I saw him lying by the wing in the snow. He rolled over and waved to me."

While the others remained low to cover Broomhead, Schreiber climbed to get above the mountains and call for rescue. The nearest help was the light cruiser *Manchester*'s helicopter, which was 100 miles north spotting the cruiser's shore bombardment of the coastal railroad. Pilot Navy Lieutenant Edward Moore and Marine artillery spotter 1st Lt Kenneth Henry volunteered for the mission to get a taste of combat. They immediately headed south, but it would take an hour for them to get there in their slow "Horse."

Aboard *Valley Forge*, pilots volunteered for missions to cover their fellow aviators. VF-653's XO, Lt Ray Edinger, led four Corsairs and two VF-194 Skyraiders to cover Thorin and Ettinger. They were on their way there when they learned of Broomhead's crash. Edinger detached a Corsair and the two Skyraiders to provide cover for Broomhead and continued on to the Thorin crash site. Over the next two hours, they strafed and rocketed the enemy who continued their attempt to capture the downed Americans, during which Edinger had a rocket hang up when he tried to fire it. Just as a relief flight of *Essex* Corsairs arrived, Edinger heard a thump and his wingman told him his Corsair was streaming oil from the left oil cooler. "I looked out at the left wing, and sure enough, it's all running out," he recalled. As he flew seaward at full throttle trying to get to Wonsan where he could ditch, he realized the engine should have been dead from lack of oil. The leak was hydraulic fluid, which meant trapping on *Valley Forge* without flaps or locked-down landing gear, and perhaps not even a tail hook, and then there was the hung rocket still on his wing.

Valley Forge advised him to ditch or divert to K-18, but having now made it out over water he was determined to land aboard.

The flight deck crew rigged the barriers and backed them with a line of tractors. Edinger's first approach was too fast and he was given a wave-off. When he came around again, the Corsair was nose-high when he got the cut. Chopping throttle, the airplane smashed down on the deck so hard that the unlocked landing gear collapsed and the rocket came off, skittering down the deck until two crewmen pitched it overboard.

Edinger climbed out and the Corsair was dragged onto the aft elevator and sent down to the hangar deck for repair.

While Edinger was giving the *Valley Forge* deck crew a scare, Lt Moore's helicopter finally arrived at Broomhead's crash position. As he flew low on approach the helicopter took hits just as Moore put it into hover. The helicopter rolled over and crashed, but Moore and Henry were able to get out unharmed except for Henry having a sprained knee. Despite enemy fire, they ran to Broomhead's Skyraider, where they found him unconscious. The two then carried him to cover.

Another attempt was made to rescue Thorin and Ettinger. Word was received at HMR-1's field of the need for a helicopter. Pilot Lt Col

William P. Mitchell and copilot Captain Robert F. Warren and crew chief Technical Sergeant Walter F. Mortimer took off with the squadron doctor, Lt Burt C. Johnson, to attempt the mission. They rendezvoused with eight Corsairs over K-50 and headed north. En route, they were diverted to the *Rochester*, where they were briefed on the situation. Despite the difficulty, Colonel Mitchell elected to make the attempt.

Once they were near the crash site, the escorting Corsairs strafed the enemy troops that were visible on the surrounding ridges while Mitchell orbited at a thousand feet. Thorin later remembered, "A Marine helicopter came looking for us, moving upslope over the open area about 200 yards outside of our hideaway. It was an HRS-1 and had capability of taking all three of us." Mitchell made a second approach and flew from south to north over Thorin's wrecked helicopter. Crew chief Mortimer reported enemy troops in holes on the ridges on both sides of the valley. The fighter escorts made additional passes and Mitchell moved the big blue helicopter around a draw and up the stream bed in the valley floor.

Thorin realized that he and the others were now bait in a trap, since they were surrounded on all sides by hidden North Korean troops. "If we were to break out into the open area where this helicopter could pick us up, both it and ourselves would be a well-centered target for all of the troops in the vicinity. All things considered, it seemed best to let the Marine helicopter pass on by." At the same time, Mitchell reported he saw no activity at the crash site and broke off the attempt. When he flew off, Thorin and Ettinger stood up and raised their hands.

Around 1600 hours, an Air Force R-5 helicopter attempted to rescue Broomhead, Moore and Henry. High winds around the mountain made flying difficult, and the enemy had now brought in heavy machine guns. The R-5 landed on the only flat land, some 200 yards from the three men. There was space in the helicopter for only two men, and Broomhead was unconscious. While Moore and Henry might make it in a quick dash, it would not be possible to carry Broomhead through enemy fire, and they would not leave him; they waved the rescuer away. The pilot came back and despite the high winds and fading light managed to make an even more dangerous landing close to where Moore and Henry were and begged them to climb aboard, but they refused again. The bad weather, approaching darkness and heavy fire finally drove the would-be rescuer off.

Rescue operations were called off for the day.

Valley Forge, *Philippine Sea* and *Antietam* had flown 70 RESCAP sorties through the day in the unsuccessful rescue attempts. The next morning, when *Valley Forge* withdrew for replenishment, she launched eight VF-194 Skyraiders to search for the downed men. The planes operated from K-18 to maximize coverage throughout the daylight hours, but no sign of Thorin, Ettinger, Naylor-Foote, Broomhead, Henry or Moore was found. Initially, the searchers reported all three men at the Thorin site had been killed when they saw the snow saturated red that appeared to be blood from a massacre; it was actually marker dye from their life vests.

James Michener reported the "deaths" in a *UPI* article, "An Epic in Failure" and a short story, "Heroes Fail to Save Pal," first published in the July 1952 *Reader's Digest*:

> Here was complete failure … Helicopter[s], planes and men were lost in the futile tragedy. The enemy had a field day and we had nothing. Nothing, that is, except another curious demonstration [that] sometimes defeat does actually mean more to democracy than victory.

In fact, all six had been captured and made prisoner. In June 1952, Thorin escaped for three days before being recaptured and returned to the camp, where he was tortured for making the attempt. In August 1953, all six walked across the bridge at Panmunjom to freedom. Ettinger's two crewmen, Jess R. McNelroy and Julian Gilliland, had also survived capture and prison camp.

After the war, Duane Thorin participated in the development of the Navy's Survival, Evasion, Resistance and Escape (SERE) training and the development of the official Code of Conduct for POWs. He later worked for the National Security Agency, where he lectured about treatment of POWs by the North Koreans and Chinese.

On February 20, *Valley Forge* departed for Yokosuka and an extended period of repair, in company with *Philippine Sea*. On arrival, James Michener departed the ship to return home.

By the end of the month, the bridges at Samdong-ni had been repaired and were back in operation.

The month of March saw increased enemy activity that appeared to presage an attempt to reactivate Pyongyang airfield, as well as moves on the front that might mean an attempted offensive. VF-831's Lt George

Schnitzer recalled a mission shortly before *Antietam* completed her deployment that involved an attack on enemy troops near Pyongyang.

> We launched at dawn, and by the time we reached our target, the deep valley it was located in was just starting to get light. Our flight leader went first, looking for targets, and soon spotted some enemy troops marching in columns on either side of the road well ahead of us. Following the other three jets in, I dropped my nose and hammed the throttle forward to 100 percent power. I banked my plane to line up my gunsight on the last man in the column.
>
> The flight leader and his wingman commenced firing and dust kicked up as his rounds smashed into the line of troops. Then it was our section's turn. I only had time for one quick burst and then a fast high-G climbing turn to keep up with my section leader. Glancing back in my rear-view mirror, I could see we had hit them hard. They hadn't heard us coming and the strafing left countless bodies lying on the side of the road. This mission had been different because we didn't usually see what our 20mm rounds could do to people. That sight made me realize we were in the middle of a bloody war.

Valley Forge rejoined *Essex* and *Antietam* on March 5, at which point *Essex* departed for Yokosuka and return to the United States. Things got off to a good start for ATG-1 the next day, when six trains were spotted by the night hecklers and the air group launched strikes against them in their hiding places throughout the day. In the end, two of the locomotives were destroyed with the other four severely damaged, while 46 boxcars were destroyed and 23 damaged and the rail line was cut at 50 locations. The next day, ATG-1 set a record in railway attacks, with 124 cuts made over 91 sorties.

March 8 was a scrub for operations due to bad weather. The next day saw VF-194's Lt (jg) Komoroff hit and forced to divert to K-50. After a day of replenishment, VF-653 took their first loss on March 11 when Lt H. L. Wright was hit by flak while attacking the rail line. The Corsair exploded on impact.

On March 12, Lt (jg) James M. Thayer and Lt (jg) Howard Borgerding were hit during their attacks and had to divert. Thayer landed his Skyraider at K-18 while Borgerding set down at K-50. It was noted in the war diary that defensive fire was getting stronger every week, a sign of communist success with the new mobile guns. VF-194's Skyraiders continued taking hits, with Lt Cdr Schreiber and Lt (jg) N. J. Johnson forced to divert to K-18 with flak damage. That night, VC-35's night hecklers provided support to the cruiser *Manchester* when she came under fire from shore batteries. The AD-4NLs scored several hits on artillery sites and silenced the North Koreans.

Philippine Sea was back on station on March 19 and relieved *Antietam* to return to Yokosuka and then to the United States. Bad weather played havoc with operations over the next two weeks, though missions were flown whenever possible.

Not only were supplies getting through from Manchuria despite the repeated attacks by TF 77, but by the spring of 1952, more than 2,500 antiaircraft weapons were distributed throughout North Korea, all supplied by the USSR. The deadliest were the 500 M1939 85mm and M1938 76mm guns, which had an effective ceiling of 25,000 feet, firing 15–20 rounds per minute. By late 1952, these weapons were firing proximity rounds, vastly increasing their effectiveness. The rest of the defensive weapons included the M1937 37mm weapon with a ceiling of 4,500 feet firing 160–180rpm. The M1941 25mm cannon, which could be in either a single or dual mount, had a ceiling of 4,000 feet and fired 250rpm.

During this period, the communists had begun to move in guns on mobile mounts, which made planning an attack more difficult, since it was now impossible to know if there were more weapons present than expected. The photo missions by the F9F-2Ps were generally flown 24–48 hours in advance of the strike, thus alerting the enemy to a possible attack while providing them sufficient time to enhance the defenses. Losses continued to increase during the remainder of the year.

March 17 saw the loss of VF-52's commanding officer, Lt Cdr H. L. Baslee, whose F9F-2B was hit by flak that set the Panther on fire; it exploded on impact. After a day of replenishment and another day of bad weather that forced cancellation of air operations, missions resumed on March 20 with VF-653's Corsair pilots getting a drubbing from the flak gunners, who shot up the aircraft flown by Lt (jg) Charles Gardner and Lt R. S. Geffel, who diverted to K-18, while Lt E. L. Kearns and Lt (jg) J. E. Gray made emergency landings at K-50. The next day VF-52's Lt (jg) C. G. Strahley was hit and ejected over the sea south of Hungnam. When the helicopter arrived, they found Strahley dead, his body tangled in his parachute. Recovery of the body was not possible and the chopper crew returned empty-handed. VF-194's Skyraiders took hits, with Lt (jg) S. W. Berry diverting to K-18 while Lt (jg) J. P. Cooper, who suffered wounds to his face, landed at K-50.

While the collective experiences of the aviators of *Essex* and *Valley Forge* would ultimately inspire James Michener's novel and the later motion picture adaptation, a singular event that happened to two pilots of VF-194 on March 22 would be memorialized in a *Saturday Evening Post* article later adapted into the motion picture *Men of the Fighting Lady*, which was released by MGM the next year.

Ensign Ken Schechter's 27th mission was another of the detested strikes against the now well-defended coastal rail line. Originally launched as a "spare," Schechter became part of the strike force when another Skyraider was forced to abort after suffering a hydraulic failure. The Skyraiders were "bombed up" with ten 220lb fragmentation bombs and three 500lb general purpose bombs, useful for cutting the rails. Getting rid of all that load involved making repeat runs over the target, which increased the likelihood of getting hit. Schechter later recalled that he was hit on the ninth of a planned 15 runs over the railway. He was at 1,200 feet when an antiaircraft shell exploded in the cockpit. Instinctively he pulled back on the control stick to gain altitude and put distance between himself and the enemy gunners. Struck by shrapnel in the explosion, he passed out for several moments, unaware that he was climbing toward a cloud bank that would have prevented his squadron mates catching sight of him. Coming to, he discovered he was blind; there was a stinging sensation in his face from the windblast through the shattered canopy. Touching his face, he realized his upper lip was almost severed. His eyes had been injured by plexiglass shards that also cut his forehead, so that blood flowed over his face. Fortunately, his radio still worked.

Schechter's shipboard roommate, Lt Howard Thayer, heard his call, "I'm blind! For God's sake, help me! I'm blind!" and recognized his voice. Thayer called for him to rock his wings; he spotted the damaged airplane moments before Schechter would disappear in the clouds, and yelled for him to put his nose down. Despite his pain, Schechter was able to follow orders.

Pulling alongside Schechter's damaged Skyraider, Thayer was able to get a good look. He later recalled his friend's head was a bloody mess and that he was surprised Schechter was still alive.

Convincing Schechter to listen to instructions, Thayer got the two airplanes headed east toward the Sea of Japan. The wind coming through the damaged canopy made radio conversation difficult. Thayer ordered Schechter to salvo his remaining bombs, which he did.

Thayer's original plan was for Schechter to bail out as soon as they were over the water. However, when he told the wounded pilot to prepare to get out, Schechter refused, with the examples in mind of Lt (jg) Strahley who had been unable to get out of his parachute once he was in the water, and of his friend Tom Pugh who had frozen to death in the water before he could be rescued. Thayer agreed and got the planes headed toward the emergency field at K-50, 30 miles away. Soon, he spotted a cruiser firing on enemy shore positions, which identified the bomb line.

They were ten minutes away from K-50, but to Thayer, it was clear from Schechter's movement in the cockpit that he needed to get on the ground fast. A minute later, he spotted a deserted emergency dirt airstrip called "Jersey Bounce."

It was what was available.

Schechter remembered seeing the field, and refused Thayer's order to lower his landing gear, since it was safer on such a field to land gear up. Thayer moved in close on Schechter's wing and set up a final straight-in approach to the landing strip. Schechter was able to follow his instructions as he talked his friend down. As Schechter passed 20 feet over the end of the runway, Thayer ordered him to kill the engine and the big blue bomber scraped down the runway to a successful stop. He remembered it as the best landing he'd ever made.

Minutes after he climbed out, two soldiers in a jeep arrived and took him back to their unit, where a helicopter picked him up 30 minutes later and flew him to K-50. Doctors there realized he needed more help than they could give, and he was soon flown to the hospital ship USS *Consolation* off Pusan, where he underwent immediate surgery. After return to the United States, where further operations at the Balboa Naval Hospital in San Diego restored sight in his left eye, Ken Schechter retired from the Navy on August 31, 1952.

The movie *Men of the Fighting Lady* was based on the stories "The Forgotten Heroes of Korea" by James A. Michener, and "The Case of the Blind Pilot" by Cdr Harry Burns. Schechter and Thayer's Skyraiders morphed into F9F Panthers and rather than landing on a dirt strip, the final event of landing aboard the carrier reminded VF-112's

Ensign Jackson who had landed aboard *Philippine Sea* while blinded in September 1950 of what he had experienced. Given that Jackson's story was well known in the aviation community, and that credited screenwriter Art Cohn worked closely with technical advisor and frequent Wonsan Harbor ditcher Cdr Paul Gray, who would have been well aware of Jackson's story, it is really not possible to conclude other than that Cohn grabbed the good story that made for a dramatic ending. The flying sequences for the movie are out-takes from Paramount's *The Bridges at Toko-ri*, licensed by MGM.

Over the next ten days, ATG-1 continued strikes against the enemy rail system. One VF-653 Corsair was lost when Ensign N. E. Sterrett was hit by flak and forced to ditch in Wonsan Harbor, where he was immediately picked up by the Yo-Do LST's helicopter.

On March 30, *Philippine Sea* experienced an emergency when Lt (jg) W. J. Cooper's F4U-5N, which had been shot up during a night heckler mission, caught fire and crashed 5,000 yards from the carrier. Cooper was able to get out and was rescued by USS *Lawyer* (DD-770).

On March 31, *Boxer*, the second carrier to make a third Korean deployment, arrived on station. Her veteran Air Group 2 was no longer an all-prop group, with VF-24 recently equipped with F9F-2B Panthers. On April 2, *Valley Forge* departed for Yokosuka. Flying his flag aboard *Boxer* as ComCarDiv 3 was famed pioneer record-setting naval aviator Rear Admiral Apollo Soucek.

Boxer's air group quickly acclimated themselves to the routine of armed recce and rail attack missions. The spring of 1952 saw an increasing stalemate develop that brought no rest as planes continued to be shot up over the same targets, while pilots risked deaths that to many seemed increasingly purposeless. Military leaders faced the question of what leverage could be applied against the enemy that might break the stalemate. To economize on losses of men and aircraft, pullout altitudes were increased while passes over the target were limited. Even so, by the end of May 1952, the bomb totals for Navy and Marine squadrons would equal what had been dropped during the entire Pacific War.

On April 16, *Philippine Sea* departed for Yokosuka as *Princeton* arrived to commence her third tour. Air Group 19, which had flown from the carrier during the dark days of the Chinese intervention in the Korean War during November and December 1950, and in the memorable Battle of Carlson's Canyon and the Hwachon Dam strikes in the spring of 1951, was back aboard for their second Korean deployment. Through her first tour that ended in late May, there were no losses in the air group, though aircraft were getting hit regularly by the increasing numbers of antiaircraft weapons deployed by the enemy. The lower losses were due to the new operating restrictions that kept attacking aircraft about 3,000 feet on pullout and limited them to one pass during which all ordnance was dropped.

Boxer's fliers seemed fortunate for the first part of the tour as regards losses, with airplanes shot up over the target but none sustaining damage that prevented their return to the carrier. This changed on April 18, when the Skyraider flown by VA-65's Lt Cdr W. P. Neel was hit by flak. The right wing was blown off at the fuselage, and Neel was not seen to bail out before the bomber hit the ground and exploded.

Four days later, strikes were launched against transportation facilities in the port of Hungnam. VF-64's Ensign S. W. Henderson's F4U-4 was hit by flak that wounded him in his head and neck. The plane sank quickly when he ditched in the harbor, but Henderson was able to get out and was rescued by USS *Rupertus* (DD-851), which daringly entered the harbor to pick him up.

That same day, Ensign R. F. Wallin landed his VF-24 Panther to record *Boxer*'s 52,000th landing. Four days later, *Boxer* set a fleet record when Ensign Herman Radke's Panther made the 12,000th catapult shot.

On April 29, Lt (jg) F. A. Rice's VF-63 Corsair was set afire by a flak hit over Wonsan Harbor that burned his hands and face before he was able to bail out. The Yo-Do scow's Horse plucked him from the harbor and deposited him aboard USS *Cunningham* (DD-752), where his burns were quickly treated.

For the men aboard the ships of the Seventh Fleet, the war took on a monotony that only changed with the seasons. After the cold of winter came the rains of spring, then the fog and haze and humidity that increased the heat during summer, capped off by the clear skies of early autumn. Sailors became used to "four on/eight off" underway watches, while the aviators came to know their targets intimately due to repetition. At home, the war receded from the headlines and front pages as the nation became less and less interested and involved, outside of those called to service through the draft and their immediate families. The booming domestic economy was such that the Navy had difficulty retaining technically trained sailors in service when a man could obtain steady civilian employment at high pay, or use his G. I. benefits for higher education while purchasing a home for his family.

In May 1952, construction of a 2,500-foot emergency landing strip on Yo-do Island at Wonsan began. The Seabees had it finished in 16 days, and over the course of June eight shot-up Corsairs that would have otherwise been ditched in the harbor were able to land on the island. There would be many more over the course of the next year.

Essex arrived in Subic Bay, the Philippines, on June 16 for her second and final deployment of the war. Air Group 5 had been replaced by Air Task Group 2. On June 21, *Bon Homme Richard* arrived on station in the Sea of Japan for the commencement of her second and final Korean deployment. She brought with her Carrier Air Group 7 on their first and only Korean deployment. Her VC-61 detachment was deploying for the first time with the McDonnell F2H-2P Banshee, which was a better photo recon aircraft than the F9F-2P, since the photo Banshee was equipped with more and better cameras.

By the summer of 1952, it was clear that the interdiction campaign was not accomplishing its goals. The Air Force now regretted the publicity they had given the code name *Strangle*. Experience had demonstrated that while rail lines could be broken and trains shot up while bridges were knocked down and motor transport harassed, the enemy was able to persist and continue operations, largely at night, to build up supplies in the forward areas. Diminishing success at interdiction and disillusion with the Panmunjom peace negotiations led to a change in overall strategy that by the fall would see attacks planned and executed against strategic targets that had heretofore not been allowed.

Even so, there were occasional victories. On July 4, VA-65's Lt Charles C. Brown was launched on a predawn heckling mission. He spotted 30 trucks, which he immediately attacked, making several passes despite heavy defensive fire that hit his Skyraider several times as he bombed and strafed the enemy. When he pulled off with all bombs and ammunition expended, seven of the 30 trucks were definitely destroyed and several others were damaged.

CHAPTER 14

WHO OWNS THE NIGHT?

Throughout the war, communist troops, trucks and trains moved primarily at night due to the nearl-total UN command of the air over the Korean peninsula during the day. The US Navy and Air Force struggled throughout the war to its end to find a way to change this.

By the summer of 1945, the US Navy was well on the way to creating a credible carrier-based night attack capability. Both the Hellcat and the Corsair had been successfully adapted as radar-equipped single-seat night fighters, while the TBM Avenger had been successful in the night attack role. The first victorious night attacks had been flown by Torpedo 10 (VT-10) from USS *Enterprise* (CV-6) in the first Truk strike in February 1944. Building on that experience, the first dedicated night carrier, USS *Independence* (CVL-22), had shown night operations were possible even from a deck as narrow and short as that found on a light fleet carrier later in 1944. After *Independence* returned to the United States, *Enterprise* operated as Task Force 58's dedicated night carrier in 1945 with Night Air Group 90 aboard, until she was put out of the war in May by *kamikaze* attack.

The postwar contraction of the carrier fleet removed the possibility of maintaining a dedicated night carrier with attendant air group, and night aviation returned to its earlier incarnation as small detachments of night fighters and night-attack aircraft aboard a carrier otherwise conducting daylight operations. Between August 1945 and July 1946, the Navy reduced its night-fighting force from 500 aircraft to 50.

In December 1946, the first night attack Skyraider variant, the AD-1Q, arrived in the inventory of VC(N)-2, the Pacific Fleet night carrier squadron. The AD-1Q was equipped with the APS-19 radar, and dropped the fuselage-mounted dive brakes in favor of a small compartment just ahead of the wing's trailing edge, in which a radar operator and electronic countermeasures operator were seated in close quarters. These and the later AD-2N variants quickly replaced the TBM-3E Avengers. By March 1948, there were 180 F6F-5N and TBM-3E aircraft, along with a few AD-1Qs and AD-2Ns, in the Atlantic and Pacific Fleet night-fighting units. In 1949, the F4U-5N appeared, and completely replaced the Hellcats shortly after the outbreak of the Korean War.

VC(N)-1 and VC(N)-2 became the Fleet All Weather Training Units (FAWTU) Pacific and Atlantic respectively in 1947. During 1948, an FAWTU fighter detachment was aboard *Tarawa* when she made her round-the-world cruise. In 1949 they were designated composite squadrons. Pioneer night-fighter Commander "Chick" Harmer, who had taken four F4U-2 Corsairs of VF(N)-101 aboard *Enterprise* in January 1944 as the first carrier-based night fighters, had remained as the "father of night aviation" after the war. Commander Bill Martin, who had pioneered night attack as commander of VT-10 during the war, served as executive officer to Captain Paul N. Ramsey, who had commanded the first night carrier air group aboard *Independence*. Thus the "institutional memory" of night carrier aviation was maintained.

Chick Harmer was assigned as commanding officer of VC-3 in November 1949 when FAWTU Pacific became an operational unit. Under his training syllabus, VC-3 emphasized night attack capability using the target rangers near NAAS El Centro, California, while the squadron operated from NAS Moffett Field on the San Francisco peninsula. In early 1950, VC-3, the Pacific Fleet night-fighter squadron, and VC-4, their Atlantic Fleet counterpart, operated some 70 F4U-5N Corsairs and F6F-5N Hellcats, as well as a few of the night attack versions of the new Skyraider following the retirement of the TBM-3Es. In January 1950, the first VC-3 night-fighter detachment had gone aboard *Boxer* with their six F6F-5N Hellcats for her western Pacific deployment. The night-fighting Hellcat also equipped the VC-3 detachment aboard *Boxer*'s replacement, *Valley Forge*, and these became the first Navy night fighters to see combat following the outbreak of the Korean War in June.

Throughout the postwar period, the Navy devoted little effort to night flying or instrument flight training. Student pilots in the Naval Air Training command received only ten hours of night flight training.

The standard fleet aircraft were poorly equipped for instrument flying, with instrument panels not designed for ease of scan by the pilot. In fleet squadrons, aviators flew 20 hours a year at night in their respective aircraft, but there was little instrument training or night carrier landing training. There was a requirement that aviators make two night carrier landings a year, but in these years of operational austerity the operating periods for such activity were frequently canceled. However, by the fall of 1950, all naval aviators were required to qualify for an instrument card demonstrating their ability to fly in instrument flight conditions.

Night qualification involved 100 hours' flying time. Training began in the old Link trainer, where a pilot became proficient at scanning instruments and operating flight controls without reference to outside conditions. The pilot then transited to the Beech SNB twin-engine trainer, where he became proficient in operating the APS-6 radar. Seventy night hours were spent in the F6F-5N, where he put together his night flying skills with his radar operation skills. The most dangerous aspect of night carrier operations was landing aboard a straight-deck carrier under the control of a Landing Signal Officer using paddles and a flight suit that had reflective panels on the arms and chest. With barriers the only backup for any small pilot error made at the decisive moment of cutting the throttle to drop aboard deck and catch an arresting wire, a night carrier landing in 1950 was extremely dangerous, with numerous accidents.

In May 1950, the night-fighter and night-attack roles were separated when VC-33 was formed out of VC-4 and VC-35 out of VC-3, taking with them the Avengers and Skyraiders operated by the senior squadrons.

VFN Detachment C, the first VC-3 night unit to go to war on *Valley Forge*, operated four F6F-5N Hellcats and two AD-2N Skyraiders. The detachment was commanded by World War II night-fighter ace Lt Cdr Bill Henry. Rear Admiral E. C. Ewen, who commanded Carrier Division 5 aboard *Valley Forge* and became Task Force 77's first commander, had been captain of *Independence* when she operated as the first night carrier and was a strong supporter of night operations. However, with no communist night air activity and little information about targets ashore, combined with the difficulty of merely flying over the difficult, unlit, mountainous terrain of Korea, the squadron primarily operated in early dawn and sunset hours where daylight gave the pilots the opportunity to spot a worthwhile target. The night aviation detachments aboard *Philippine Sea* and *Boxer* that joined *Valley Forge* over the summer operated in a similar manner.

The Atlantic Fleet carrier *Leyte* brought night detachments from VC-4 and VC-33 with her when she reported to the Seventh Fleet in October 1950. During that month, the night detachments aboard the four carriers carried out an increasing number of night "heckling" operations as they went after retreating North Korean units following the Inchon landing. When *Princeton* arrived in November, she brought with her the first VC-35 detachment to see combat along with a six-Corsair detachment of VC-3 commanded by Lt Cdr Danny O'Neill.

During the bad weather that came with the Chinese intervention, the radar-equipped Skyraiders of the night detachments aboard the four carriers were also used to guide the Skyraiders and Corsairs of the other squadrons through bad weather so they could strike their targets. The Navy and Marine night hecklers were crucial to the Marines' success in breaking out of Marshal Peng's planned trap.

After Operation *Strangle* began in 1951, the night attack units aboard the Task Force 77 carriers were employed in searching for and attacking communist railroad repair crews who mostly operated at night. In April 1951, Lt Don Shelton of *Princeton*'s VC-3 detachment spotted and bombed what turned out to be an ammunition train. "The explosion was so big, they could see it over the horizon from the ship, which was 60 miles off the coast," he recalled.

A few weeks before this, Shelton had one of the most singular experiences of any night flyer: landing his Corsair aboard ship at night, dead-stick, without power and unable to execute a go-around if he couldn't put the airplane on the deck on the first attempt.

On March 3, 1951, Shelton and wingman Lt (jg) Harley Dean "Hot Dog" Mayfield were launched on an early morning "night heckle," flying from Wonsan to Hungnam, "looking for whatever we might find." Shelton recalled, "Over Wonsan, Hot Dog reported engine failure and we briefly discussed whether he bail out and try for Yo-Do Island in Wonsan Harbor, try for the emergency field at K-18 some 35 miles south, or try to return to a carrier." Mayfield reported that he had climbed halfway out of the cockpit as he prepared to bail out when his engine started running again. Climbing back in the cockpit, he radioed he would try for a carrier. Shelton kept on with the mission as Mayfield successfully returned to *Princeton*.

> I resumed the mission to Hungnam, attacked a convoy of five trucks easily visible on the road and flew back to Wonsan. Over Wonsan Harbor, my engine quit. I was not able to get it running normally, but found I could keep it running at idle by fingering the engine primer. I didn't want to bail out, so I decided to try for a carrier. I informed the carriers of my situation and was told to switch to the LSO frequency on *Princeton*, since she had a ready deck. The LSO was Bill Spell – he and I had done considerable night work together and I had total confidence in him. With constant finger priming, I arrived back over *Princeton* at about 3,000 feet just before dawn and started my approach. I told Bill that I would not be able to go around, so we had to do it right. The descending spot landing technique worked fine and I trapped on the Number Three wire. Since I had no power to taxi expeditiously, I shut down in the wires, which made the Air Boss very unhappy.

The cause of the two engine failures on one mission was traced to a recent change in type and location of the F4U-5N fuel pump. The new location could result in a frozen fuel pump when flying in cold weather if all the water in the system was not drained when refueling. By bringing the Corsair back aboard with the pump still frozen rather than bailing out, the mechanics were able to find and cure the problem. Shelton explained, "I didn't bail out because I wasn't wearing a poopy suit due to the fact it was cumbersome to move in, had lousy-fitting heavy boots, and the amount of time it took to get in the suit without working up a sweat. However, I did wear the poopy suit after that, grudgingly."

The night flyers generally launched in a two-plane section. Once over Korea, there were two methods of operation. In one, the two aircraft separated, with each pilot searching for targets. The APS-19 radar carried by the Corsairs and Skyraiders was useless when it came to detecting landmarks on the ground or small troop units, while the mountainous terrain of North Korea blocked the radar from seeing what might otherwise have been seen. The APS-6 was better for ground mapping. The result was that the night fliers relied on visual spotting of targets. While trains could be spotted because of their smoke, trucks with "blackout lights" were difficult to spot unless the pilot was flying at lower altitude, which was only possible on a moonlit night. Once one of the section had discovered a target, they would be joined by the other, who flew to the position using the secondary fire of a first attack or a flare. The section leader was responsible for ordering the attack heading, pullout direction, altitude separation and departure course.

The other method of operation was for the two planes of the section to remain together. The section leader would fly at a lower altitude, searching for targets, while the wingman remained higher, navigating for the pair and keeping the leader in sight by his turtleback light. A dark night was likely to be least successful, since the pilots were required to stay above 6–8,000 feet by the surrounding terrain, which made it difficult to spot anything below.

The preferred method of attack was to strafe the target in hopes of setting a fire and stopping the target, which would then give them opportunity to attack with bombs. The best bomb was found to be the 220lb fragmentation bomb, equipped with a "daisy-cutter" fuse to ensure an explosion above the ground and maximum spread of shrapnel. Flares were a last resort, due to the fact their bright but diffuse light would destroy a pilot's night vision.

Many of the night flyers were convinced that their four or six aircraft detachments were responsible for more direct damage to enemy trains and vehicles than all the attacks carried out in daylight by the rest of the air group. The problem was that the night operations required the flight deck crew to respot the deck for takeoff and landing operations, which were carried on beyond the normal "operating hours" for daylight missions and resulted in a heavier workload for the men, without there being a really worthwhile "return on investment" in terms of damage inflicted on the enemy. This was the same problem that had resulted in the assignment of a "night carrier" fully committed for night operations to the fast carrier force in the final year of World War II. There were many requests during the Korean War for assignment of a carrier to night operations only, but there were insufficient ships available to remove one completely from the daylight operations of the rest of the task force. Had the war continued past July 1953, however, plans were being made to assign *Princeton* as a full-time night carrier for Task Force 77.

In mid-1951, the AD-4N Skyraider made its appearance with the night-attack detachments. Crew positions were the same as the earlier night-attack Skyraiders, but the airplane now carried four 20mm cannon rather than two. The AD-4NL that showed up that fall was specially "winterized," with rubber de-icing boots on the flying surfaces and a system of flaps inside the front of the cowling that could be closed to keep the engine warm. The F4U-5NL that appeared in the fleet at about the same time had similar de-icing boots on wings and tail, as well as a fluid propeller de-icing system that prevented ice buildup between the cowling and the propeller. Both aircraft had improved cockpit heaters. The AD-4NL was equipped with the APS-31B radar, fixed to a wing station. The new radar was more powerful and reliable than the earlier APS-19, capable of scanning 135 degrees forward of the nose, and with information presented in a plan position indicator (PPI) on the operator's radar scope. Unfortunately, it was no better than the APS-19 for detection of vehicles or troops on the ground.

In January 1952, Operation *Moonlight Sonata* was introduced. This involved the launch of ten Corsair or Skyraider sections from the carriers in the Sea of Japan at 0300 hours each morning to search for trains, in the theory that with the ground snow-covered, the tracks and trains would be easier to see on a moonlit night. The operation continued through March, but only five locomotives and their trains were spotted, with two locomotives destroyed. In May 1952, Operation *Insomnia* began. Three two-plane sections were launched at midnight, with three more at 0200 hours. For a period, the tactic resulted in unopposed attacks on heavily defended areas, and on one occasion 11 locomotives were trapped in the Muchon region and later destroyed by daylight attacks. However, this was one of the most heavily defended areas in North Korea, and five Corsairs were shot down in the daylight attacks. In the two months of Operation *Insomnia*, 16 locomotives were sighted, of which nine were destroyed and two were badly damaged.

This system of night attack was further modified in July 1952. Attempting to provide all-night operations without over-working the flight deck crews, three teams of hecklers were launched at dusk. One returned to the ship at night to provide a dawn strike capability, while the other two landed ashore, then took off before dawn to search out targets that could be stopped for later daylight attack, with the night crews landing back aboard following the launch of the first strike of the day.

That fall, the North Koreans began more widespread use of air search and gunlaying radar, which ended the relative safety the night attack crews had enjoyed in the darkness. In early October, night-flying MiG-15s were vectored against Navy aircraft. This finally led to Commander Seventh Fleet deciding to concentrate on daylight attacks on the grounds that the results at night didn't merit the increased workload for the crews.

Being land-based, the Marine night fighters did not have the operating difficulties faced by their carrier-based counterparts. Marine night aviation capability had been maintained after the end of World War II, and the pioneers such as Colonel Ross Mickey and Major Hunter Reinburg were in senior squadron command positions.

VMF(N)-513 was among the first Marine squadrons to arrive in Korea, and operated its F4U-5N Corsairs over the Pusan Perimeter during the desperate fighting in August and September 1950. The squadron was joined by the F7F-3N Tigercats of VMF(N)-542 after that squadron arrived in Japan in September 1950. Together, the two squadrons performed night intruder missions over North Korea, and their pilots were among the first to verify that Chinese "volunteers" were entering North Korea in November 1950.

During the advance into North Korea, VMF(N)-513 first advanced to Wonsan in October, arriving before the Marine infantry who were offshore awaiting the Navy's clearance of the mines blocking the harbor. The Tigercats of VMF(N)-542 flew from Japan to Pusan. Both units moved on to Yonpo outside the port of Hamhung, where they provided night cover for the Marines in the Chosin Reservoir during the withdrawal. From December 1 to 13, 542's "Tigercats" flew 127 missions, fired 38,305 20mm rounds, shot 534 5-inch rockets, and dropped 116 bombs in support of their fellow Marines. Their critical support at Chosin led to VMF(AW)-542 being awarded both the Navy and Army Presidential Unit Citations. On December 13 the squadron left Yonpo to continue combat operations from Itazuke air base in Japan. VMF(N)-513 flew back to Pusan, where they operated for the next four months.

VMF(N)-542 returned to the United States in February 1951; it would become the first Marine jet night-fighter squadron when it began operating the new Douglas F3D-2 Skynight. The squadron left behind its Tigercats, which were taken into VMF(N)-513 and operated alongside the Corsairs. Squadron commander Lt Col James R. Anderson coined the squadron's nickname of "Flying Nightmares" in March 1951, in recognition of the squadron's mission, i.e., to become the enemy's "flying nightmare." The 15 F7F-3N Tigercats and 15 F4U-5N Corsairs were based at K-1, Pusan West at the time. The unit was responsible for all night interdiction support and air defense for

UN forces. That month, the squadron flew 2,086 hours in 604 night sorties, which demonstrated how vital its work was.

The squadron's work was not limited to interdiction. The North Korean Air Force operated Po-2 biplanes and Yak-11 trainers for their own version of "night heckling." The two-man crews flew the slow trainers over the front lines, throwing hand grenades over the side to keep UN troops awake at night. The Po-2 was particularly ubiquitous. First flown in 1928 as a replacement design for the World War I Avro 504 trainer still in use by the Red Air Force, it gained fame in World War II as a night bomber and harasser, known to the German troops as "sewing machine" for the rattling sound of its engine, while Finnish soldiers called it "the nerve saw." It quickly became known to the Americans as "Bedcheck Charlie" for the nerve-wracking sound of its powerplant.

The communist night hecklers were successful beyond their numbers. A lone Po-2 attacked Pyongyang airfield in November 1950, dropping a string of fragmentation grenades across the 8th Fighter-Bomber Group's parking ramp. Eleven F-51D Mustangs were damaged in the attack, three so badly they had to be destroyed several days later when UN forces abandoned Pyongyang in the face of the Chinese offensive. Seven months later, on June 17, 1951, two Po-2s attacked Suwon air base south of Seoul at 0130 hours, dropping hand-thrown fragmentation bombs. One hit the 802nd Engineer Aviation Battalion's motor pool and damaged equipment. More seriously, the two bombs that were dropped on the flightline of the 335th Fighter Interceptor Squadron damaged more F-86 Sabres than the NKAF achieved in the rest of the war. One of the Sabres was hit in a wing and set afire. The aircraft was gutted as the fire quickly took hold. Further loss was prevented by the ground crews who quickly moved other Sabres away from the fire, but eight others were damaged, four seriously, while one Sabre pilot was wounded. The North Koreans officially credited NKAF Lieutenant La Woon Yung for the daring attack.

In July 1951, VMF(N)-513's Captain Don Fenton shot down a Po-2 over Seoul, flying an F4U-5N Corsair. A year later, 1st Lt John Andre shot down an NKAF Yak-9U over Seoul; this marked his fifth night victory, on top of four scored in World War II with VMF(N)-514 in the Philippines, making him both one of the few pilots to become an ace over two wars and one of the few to score all his victories at night.

During the spring and summer of 1953, NKPAF night activity over Seoul intensified. While there had been initial success against them in

1951 using propeller-powered night fighters, the record with jet night fighters was not good. One Po-2 was shot down in early 1952 by an F-94B when the pilot throttled back and dropped gear and flaps to stay with the slow biplane; unfortunately, the recoil of the guns caused the fighter to stall and spin, killing the pilot and observer in the subsequent crash. In the summer of 1952 a second F-94B was lost when it collided with the Yak-11 it was chasing. Following this incident, four armed T-6 Texans were used unsuccessfully through the winter of 1952–53. The new Yak-18s that replaced the Po-2s had their most successful night on June 16, 1953, when two "Bedcheck Charlies" destroyed five million gallons of fuel in an Inchon dump. The incident forced the Air Force to ask the Navy for assistance the next day.

On July 20, Lt Guy P. "Lucky Pierre" Bordelon, Officer-in-Command (OIC) of VC-3 Detachment D, aboard *Princeton*, was detached from the carrier for temporary duty ashore at K-16, the Marine airfield at Pyongtaek. He took two of the detachment's F4U-5N Corsairs, including BuNo 124453, his personal aircraft named "Annie-Mo" for his wife, with the assignment of hunting the Bedcheck Charlies.

Bordelon had won his Wings of Gold in 1943, but only barely. He considered himself lucky to have been assigned as a flight instructor afterwards, later telling his daughter Michelle that "being kept back from going out to the fleet was the best thing that could have happened to me, because then I really learned how to fly." Having taken a regular commission after the war, he was serving as assistant gunnery officer aboard the heavy cruiser *Helena* when the Korean War broke out and saw action off Korea during the fighting in 1950 and 1951. Requesting reassignment to aviation, he was ordered to Composite Squadron 3 at NAS Moffett Field in April 1952. Later that year, he took a detachment of F4U-5Ns aboard *Princeton* and flew 41 night missions during her Korean deployment.

Over the next week, the Bedcheck Charlies failed to appear, due to the bad weather associated with the summer monsoon. But on July 29, the Marine radar operators at K-16 Pyongtaek picked up intruders, and Bordelon launched shortly before midnight. He was quickly vectored onto the tail of an intruder he identified as a Yak-18, a two-seat monoplane trainer. The gunner in the rear seat spotted him and opened fire, but his two-second burst from four 20mm cannon blew the enemy aircraft out of the sky. Within a matter of minutes, he was vectored onto a second Yak-18, whose gunner also spotted him before he opened fire. This time he lit the Yak on fire and watched as it broke up in midair, with the pieces burning all the way till they struck the ground.

With a forecast for clear weather the next night, Bordelon flew a combat air patrol over Inchon. Radar picked up bogeys and he was vectored onto what he identified as two La-11 fighters. He later described the fight:

> The La-11s were in a loose trail formation, so I pulled in right behind the rear aircraft and gave a "Tallyho!" on them. I was cleared to fire, and at once opened on my targeted La-11. Two short bursts of cannon fire was all it took. This La-11 began to burn, and it dove straight down into the ground.
>
> The lead fighter started to follow the burning aircraft down, but I closed to point-blank range and immediately opened fire on it. This target turned left, then right, and started to climb as I gave him another burst. With that, he exploded in flames and fell apart. I followed the largest burning mass down to 500 feet and saw it crash near my first kill. "Over so fast?" I thought.

With four Bedcheck Charlies lost over two nights, the North Koreans sent no more intruders for the next two weeks, during which Bordelon maintained his nightly patrols. One night over Inchon, he was vectored toward a bogey he identified as two Tupolev Tu-2 twin-engine light bombers. He was unable to fire his cannon due to what was later found to be a disconnected wire in the firing solenoid. Unable to shoot them, he applied full throttle and pulled ahead of the enemy bombers, then turned back directly at them. He dropped his landing gear, which turned on his landing light, and aimed it at them. One pilot panicked and dove straight down, while the other pulled up and just missed him. It was unclear if the first had managed to pull out and fly home, or had hit the ocean.

On July 16, Bordelon was vectored onto a fast-flying bogey. As he approached from the rear, he identified it as another La-11 from the distinctive exhaust flame pattern. When he was given permission to open fire, the enemy fighter immediately began evasive action, a sign the North Koreans might be listening in on the radio frequency. UN antiaircraft opened up below, but Bordelon stayed with the enemy fighter through the flak bursts. He finally got on the target's tail and opened fire with a long burst that exploded the La-11, blinding Bordelon from the flash of light. As his Corsair fell off to the side, he flipped on the autopilot, which righted the plane.

This victory made Guy Bordelon the only Navy ace of the Korean War, the only ace of the war to score all his victories at night, and the last pilot to become an ace while flying a piston-engine fighter. He was welcomed back aboard *Princeton* with an honor guard of five Marine sideboys. "Annie-Mo" was left behind at Pyongtaek, where the Corsair was destroyed in a landing accident a week later when an Air Force pilot unfamiliar with the type tried to fly it.

The tactics used by the Marine fliers were different from those of the carrier aviators.

Captain Lynn Williams, a pilot in 513 during the early Pusan Perimeter period, remembered:

> We usually substituted flares and fragmentation bombs for rockets and napalm on missions. We carried the same type of loads as the F4U-4 day fighters for daylight missions except that we loaded our 20mm cannons with straight high-explosive incendiary ammo. Tracers tend to destroy night vision. Ball and armor piercing was of little value at night. High-explosive incendiary rounds impacting also could destroy night vision, but proved valuable in aiding our pilots during diving attacks on ground targets.
>
> We learned to judge how close we were getting to the ground between firing and the rounds' impact. It was definitely time to pull out of the dive and to climb rapidly on instruments. In the rugged mountains and high plateaus of North Korea you often couldn't know the elevation of the target or whether you were flying down a valley on a fairly flat plateau or if you were headed straight into a mountainside.

During November, when the Chinese intervened in the war, night operations over North Korea were different from what they would be later. Captain Harold E. Roland recalled:

> The road well north of the bomb line in the Sibyon-ni and Chorwon areas [was] thick with trucks after the Chinese had entered the war ... They would run with headlights on in convoys of ten to 15 vehicles

> with short delays between convoys. Indeed, from a distance their headlights would glow in the sky not unlike a busy road system in the US. They were all free game, but the small, abrupt mountains in the area and, of course, not knowing exactly where even the flat ground was caused us to be cautious about going down after them without light.
>
> I found out on some of the early missions that pickling off bombs and rockets or strafing from 1,000 feet did little good. The truck drivers were bold, perhaps learning that the B-26s and F-82 Twin Mustangs that pickled off their ordnance above 1,000 feet were not a threat. They would usually keep driving when you tried to attack at a safe altitude. Even if they stopped and turned off their lights, we could not claim anything.

The standard for claiming success in an attack was that credit for destruction would only be granted if a burning truck was seen. When a night-fighter strafed a column, the drivers would not move until the aircraft departed without damaging anything. Roland explained:

> Some of us discussed the situation and agreed that we had to hit an individual truck to do the needed damage. We then abandoned the tactics of bombing or strafing up and down a road that contained trucks for one of singling out individual trucks or tightly bunched groups.

Pilots tried to improve their night time performance in different ways. Roland recalled how he prepared for a mission:

> As soon as I was strapped in, I liked to put on my mask, select 100 percent oxygen and take a few deep breaths. It seemed to clear the vision. At the end of four and a half hours at low altitude, 100 percent oxygen could suck the juices from your body, but the improved night vision was well worth it. We always took off away from the low mountains to the north. Turning slowly back over them, my F4U-5N labored under the napalm, belly tank, and eight loaded wing stations. I usually leveled off at 6,000 feet or 7,000 feet, using 1,650rpm, trying to conserve fuel, cruising slowly at about 160mph indicated.

Frequently the "Flying Nightmares" would operate with Air Force C-47s as flare droppers, using million-candlepower magnesium flares that allowed them to make repeated runs on a convoy. Pilots had to be sure to pull out away from the flares to avoid being silhouetted and thus exposed to ground fire.

Following the UN retreat out of North Korea, VMF(N)-513 was again based at K-1, Pusan. Captain Bill Webster, one of the top "truck busters," remembered one particular mission:

> One night I was on a road reconnaissance mission when the moon was full, and the trucks were running without their headlights. This required us to fly one of the most dangerous missions in that we had to come in just above treetop level, following the reflections of the road in the moonlight, and as we passed over a black speck in the road, we would pull up, do a quick wing over for a strafing pass.
>
> Due to the reduced visibility in the moonlight, we were well within firing range for our 20mm when we got our pippers on the black shadowy form. Well, I was passing this road junction when I noticed several black images close together, and as I pulled up for a wing-over, there was a long burst of heavy-caliber automatic-weapons fire emanating from the side of the road. As I dived down for a strafing pass, two separate vehicles opened up on me from the same spot. At that time, I felt I had the advantage in that as long as they were shooting at me with tracers, I knew exactly where to put my pipper, and they were firing at my sound. Each time, when I pulled up in a tight wing-over, they would adjust their fire to the left.
>
> On this mission, I had six 265lb frag bombs under my wings. After a couple of firing passes, I switched to bombs and dropped strings of three on each pass. This created some enormous secondary explosions which stopped all of the automatic-weapons fire. At this point, I dropped down to treetop level again and continued running the road, looking for trucks, and with some good luck, I was fortunate to spot several which I took care of with my 20 millimeter guns.

The most successful night for the "Flying Nightmares" was April 29–30, 1951, when the pilots destroyed 67 vehicles and damaged 45, severely damaged a train and destroyed eight buildings. Squadron commander

Lt Col James Anderson later commented about the level of difficulty such missions represented: "I think it would be safe to say that Korea was one of the most difficult countries in the world for effective tactical aviation."

While bad weather over North Korea led to difficulties, it was just as dangerous to fly under overcast skies that blocked or impeded moonlight. However, if the pilot was operating with a flare ship, the overcast could work in his favor, as Captain Roland explained:

> If the clouds were patchy, I would go down to see if there was a workable ceiling under it. When there was at least 2–3,000 feet, in these cases there could be a treasure trove of trucks using the roads down between the hills and protected by the clouds. On occasion I would find tankers parked there, refueling some of the trucks. The technique was to direct the flare plane to drop flares through the cloud deck. When they floated through to the clear air below, the light reflected off the clouds and gave very good illumination of the situation. It was like flying around in a giant cave. You could see the hills on both sides of the road, disappearing into the clouds and darkness at either end beyond the flare light. If the flare plane allowed the flares to go out, you could only pull back on the stick and hope you were climbing out away from the hills. When you were down to one remaining flare, you began to beg for more!

The squadron also engaged in night close air support for troops on the line. Captain Art Wagner took off one night on a mission against trucks. Just as he was crossing the bomb line, he heard a call from a forward air controller that there was a Chinese attack and that several UN positions had been overrun. Wagner diverted from his planned mission and the FAC was able to guide him on several runs, strafing and napalming the attacking enemy, then bombing them with his fragmentation bombs. When he ran out of ordnance, Wagner diverted to K-18, where he rearmed and refueled, then returned to the fight. After several more runs, the FAC informed him the enemy was withdrawing. The next morning, over 150 dead soldiers were found on the battlefield.

During the summer of 1952, VMF-542, which had re-equipped with the Douglas F3D-2 Skynight, returned to Korea, commanded by Col Ross Mickey, who had led the squadron in World War II. The squadron was integrated into VMF-513, and the "Flying Nightmares" continued to operate the new jets, with the Corsairs and Tigercats for night interdiction, though by the end of the year the Tigercats were withdrawn due to a lack of replacements for their losses.

The Marines entered a new phase of the war that fall. A year earlier, the MiG-15s had inflicted such losses on Air Force B-29s making daylight attacks that the big Superfortresses had been forced to change over to night attacks. In the summer of 1952, MiGs appeared in the skies over North Korea at night, and also over Seoul. When three B-29s were shot down on June 10, 1952 by a dedicated night-fighting team of MiGs that were guided to the bombers by ground radar control, bombing raids were suspended until jet night-fighter escorts became available.

The Air Force quickly dispatched the new Lockheed F-94B jet night fighter to Korea, where the jets replaced the F-82G Twin Mustang night fighters of the 68th Fighter Interceptor Squadron. The Starfires intercepted several MiGs over Seoul, which ended the intrusions. Additionally, the 319th Fighter Interceptor Squadron was sent to Japan. The unit began operating from Suwon in January 1953 to provide CAP for the B-29s over North Korea. The F-94B suffered from the fact that it was only armed with four .50-caliber machine guns, which was an inadequate armament with which to down a MiG-15. Additionally, the Hughes E-1 fire-control system, which incorporated an AN/APG-33 radar derived from the AN/APG-3 that directed the B-36's tail guns, was only good over short range. Also, it was powered by a single engine, which meant any damage suffered over North Korea could result in loss of the airplane, with the communists recovering its gear for the Soviets.

The F3D-2 was very different. It was underpowered with its two J-34-WE-24 engines, which gave it a modest performance, but it could fly on one engine, which increased safety. The large APQ-35 was the most advanced aerial radar system of the time and combined three different radars, each performing separate functions: an AN/APS-21 search radar and an AN/APG-26 tracking radar were both in the large nose radome, while an AN/APS-28 tail warning radar provided protection against attacking enemy fighters. The search and tracking radars could spot an airborne enemy at 20 miles, more than twice the range of the Air Force jet. Most importantly, it was armed with the now-standard Navy gun armament of four 20mm cannon, which meant it could easily knock down any MiG it locked onto. With its straight wings, the F3D-2 was more maneuverable than a MiG at night.

In September, VMF(N)-513's Skynights were assigned to escort the B-29s over North Korea. The strategy was to place fighters along the bomber's planned route, flying a "racetrack" course above the bomber's altitude, searching with their radars and defending against the MiGs. During several missions, the Marines locked on to enemy fighters but lost them in the dark. However, the Soviets knew they were there, and this caused the MiGs to break off their attacks before they could score against the bombers.

On the early morning of November 3, 1952, the Marines made history with the first radar kill of an enemy jet at night. Pilot Maj William T. Stratton, Jr., and radar operator Master Sergeant Hans Hoglind shot down what was first credited as a North Korean Yak-15, though this was later changed to a Yak-17.

On November 8, the first MiG-15 was shot down. Pilot Captain Oliver Davis and radar operator Warrant Officer Dramus Fessler were at 19,000 feet northwest of Pyongyang when a ground controller at Cho-do Island informed them there was an enemy aircraft 10 miles straight ahead at 12,000 feet. Davis pushed his throttles to full power and dived the Skynight at full speed to catch up, while Fessler picked it up on the radar. As he came up on the target, Davis picked up the bright glow of the MiG's tailpipe. Moving into range, he fired a burst straight up the tailpipe, which sent the enemy fighter down in flames.

The Skynights weren't only after MiGs. Over Seoul on December 10, pilot 1st Lt Joseph Corvi and radar operator Master Sergeant Dan George locked on to a Po-2 "Bedcheck Charlie." Without visual contact, Corvi opened fire and blasted the slow biplane out of the sky, the first time a night kill had been made by anyone solely by use of radar. Thirty minutes later they locked onto another enemy intruder and repeated the performance, though they were only credited with a probable.

With the squadron's strength increased from 18 to 24 F3D-2s, the Marines were able to increase the number of planes escorting a B-29 raid, upping their chances of spotting and killing an attacking MiG. On January 12, 1953, the second MiG-15 was shot down. By June, two more would be credited to the "Flying Nightmares." The squadron was eventually credited with ten confirmed night kills during the Korean War.

The Skynights became such a threat that the MiGs were sent after them. The Russians developed a strategy to trap the Skynights, which involved ground controllers guiding four MiG teams to pursue a Skynight, with the goal of putting one MiG in front of the American fighter as a decoy while the other three flew below and behind the leader. Once the F3D committed to pursuit of the leading MiG, the trailing MiGs would zoom-climb onto the Skynight's tail. If the Skynight crew didn't pay attention to the tail warning radar, the next sound they'd hear would be the shells from a MiG's cannon hitting their aircraft. The MiGs would not break off combat until they ran low on fuel.

The enemy tactic paid off on July 2, 1953, when the MiGs caught the Skynight piloted by Lt Bob Bick. He reported he was attacking a target ahead, followed by a terse message: "Taken a couple of 37s." He was not heard from after that. A week later, Col Mickey's Skynight was damaged by a MiG. When he arrived back at K-1, he found he could not lower the gear and was forced to make a belly landing. This was dangerous, since the only entrance and exit from the cockpit was through a chute that opened on the bottom of the aircraft. Mickey and his radar operator were both injured in the crash landing, and he was only able to save them by smashing out the side window of his cockpit and crawling out, then pulling the radar operator out.

Between November 1952 and June 1953, the Skynight scored six confirmed and two probable kills, making it the most successful jet night fighter to ever see combat.

The battle at night was not one-sided. Throughout 1950, the night flyers were able to operate with general impunity, due to the fact the enemy did not have radar with which to aim their defensive antiaircraft guns. That began to change as the battle line stabilized in early 1951. Radar sets from the United States, Britain, Japan, the Soviet Union and possibly ex-German sets from World War II came to be used by the North Koreans over the two and a half years of war remaining. Many of the US and British sets had been captured in the fighting following the Chinese intervention in the war, but these sets were also from stocks provided to the USSR through wartime Lend-Lease, the most important of which were the US SCR-270 and SCR-271, and the British-developed AA Nos. 1, 2, 3, and 4, which were for searchlight control, Front and fire control. By mid-1951, the North Koreans were using Soviet-designed radars. The performance of the American

SCR-270 and the Soviet RUS-2 was rated “mediocre,” while the British equipment and the Soviet “Whiff” and “Token” sets were considered excellent. Signal analysis from electronic reconnaissance missions flown by SAC RB-50Gs also indicated that the excellent German “Freya” radar was also used in limited quantities.

Task Force 77’s AD-4W radar-equipped ECM Skyraiders were used to hunt down enemy radar sites. By the summer of 1952, over 100 communist-operated radars had been detected in North Korea. By this point, many of these sets were mobile, which permitted the enemy to frustrate antiradar strikes by moving locations. The Navy crews concluded the enemy equipment was “of good quality and intelligently used.” The enemy developed cautionary and deceptive practices to make discovery difficult. As an example, a set might make three sweeps in an hour and then be turned off, and the enemy was always alert to the Skyraider “ferrets.” If an ECM (Electronic Countermeasures) aircraft turned toward a radar, the set would immediately cease transmitting. Eventually, ferret missions were flown with two aircraft so that a quick fix could be obtained on a position without having to overfly it.

On June 16, 1952, a special attempt was made to thwart enemy radar during a strike against Kowon. Two ECM Skyraiders arrived before the rest of the strike, detected two radars, and dropped chaff to fill the screens with clutter and multiple images. The radar-directed antiaircraft fire reportedly “went berserk,” with flak bursts a mile off in deflection and several thousand feet off in altitude. Unfortunately, the Kowon strike exhausted the Navy’s entire stock of chaff, though the Air Force began to employ chaff from B-29s from September 1952 through the end of the war with success.

Valley Forge’s VC-35 Det. Team Baker, led by Lt Cdr W. C. Griese, performed one of the most interesting night heckler missions of the war on May 3, 1953. When aerial reconnaissance showed water flow in the tailrace of the Chosin No. 1 power plant – which had been hit and badly damaged back in the summer of 1952 during the attacks on the North Korean hydroelectric complexes – Griese sent three AD-4Ns to hit the plant at night. While the defending gunners were very active during daylight hours, he had noticed they were silent at night. The Skyraiders were launched at 0300 hours and arrived over the plant an hour later after navigating by radar. The leader dropped an illuminating flare, then joined the others in dropping two 1,000lb bombs each. The plant showered sparks after the bombs were dropped.

The F3D-2s weren't the only Navy jets flying in the night skies of North Korea in the final months of the war. Lt Cdr James J. Kinsella, CO of *Boxer*'s VF-52, knowns as "Kinsella's Fellas," was convinced the Panther could operate with greater effectiveness at night than the Skyraiders due to its silent approach and higher speed. Kinsella and three experienced Panther pilots on their second Korea tours were launched from the carrier the night of May 26, 1953 and made a road reconnaissance from Pukching to Chongjin. The enemy was on the move, and the jets were able to take the communists by surprise, attacking before the defenders could open fire. They destroyed nine trucks and damaged 14 others, a very good score for a night-heckling mission. With Kinsella having demonstrated the effectiveness of jets at night, plans were made to have other air groups develop this capability, which would have been implemented fleet-wide had the war continued longer.

Throughout the Korean War, the enemy was able to operate successfully at night, which meant that no matter how much effort was expended on interdiction during the day, they could meet the modest supply requirements of Chinese and North Korean troops on the front line. The lack of a dedicated night operations aircraft carrier meant that there was never enough effort expended on the more productive night operations, though sustained night operations in the Sea of Japan were also difficult due to the fact they were flying from straight-deck carriers with the concomitant dangers involved in landing at night. The Navy learned from Korea, and by the time the next war rolled around ten years later, naval aviation truly was a 24/7 day/night/all-weather force.

CHAPTER 15

THE CHEROKEE

In May 1952, Vice Admiral J. J. "Jocko" Clark assumed command of the Seventh Fleet. His leadership would change the scope of the war. A member of the Annapolis class of 1917, Clark was immediately involved around naval aviation from his first assignment, though he did not become a naval aviator until 1925. From that point onward, he was closely involved with the development of the tactics and aircraft that would later be crucial to victory in the Pacific War. He was additionally fortunate to have been one of the young officers who served with Admiral Moffett during his years as chief of the Bureau of Aeronautics, and to have served under both Raymond A. Spruance as navigator of the destroyer USS *Aaron Ward* and Ernest J. King during his time as captain of USS *Lexington* as commander of the elite VF-2 "Flying Chiefs."' Following successful command of USS *Suwanee* (CVE-27) in the North African invasion and later in the Solomons campaign, he commissioned the new *Yorktown* (CV-10) and participated in the opening moves of the Central Pacific campaign before fleeting up to command Task Group 58.1 from shortly before the Marianas invasion until the successful conclusion of the Okinawa campaign.

As one of the leaders of "The Revolt of the Admirals," Clark managed to obtain appointment to a seagoing command that allowed him to get away from the bad blood of Washington politics and commanded a carrier division during two Mediterranean tours. With the outbreak of war in Korea, he requested a combat assignment. In October 1951, Clark arrived in Korea and took command of Carrier Division Three with his flag aboard USS *Bon Homme Richard* (CV-31).

Clark realized after his first tour as CTF-77 that "our interdiction campaign didn't interdict." This was because of the North Koreans' ability to make repairs to roads and bridges quickly. Clark, a staunch advocate of the maximum use of carrier air power, was frustrated during his tours as commander of Task Force 77 that the carriers were limited to the mission of Operation *Strangle*, which saw repeated strikes against the same targets with increasing defenses for little return.

During this time, the Air Force saw similar results to their strikes in western North Korea. The discouraging returns from interdiction strikes and UN disillusion over the stalled talks at Panmunjom led the FEAF staff to seek alternatives. The enemy had been able to maintain sufficient supplies to front-line forces despite the Air Force and Navy interdiction strikes, and was now believed to have enough supplies on hand to support offensive action.

Given that if the enemy did mount an offensive, his forces would be brought into the open where they would be subject to heavy damage as had occurred during the battles of the first half of 1951, Air Force planners proposed concentration on the maintenance of air superiority in MiG Alley and increasing strikes to maximize the cost of war to the communists. Beginning in May 1952, Fifth Air Force sent large formations of F-84 Thunderjet fighter-bombers against concentrations of supplies and equipment in the enemy's rear. In late May, the 116th Fighter-Bomber Group, an activated Air National Guard unit, flew Operation *High Tide*. Leaving their base at Itazuke in Japan, the F-84s refueled in flight from B-29s modified as tankers, to cross the Sea of Japan and hit the transportation center of Sariwon in North Korea. The communists were surprised and the 48 F-84s successfully dive-bombed the target, then turned south, met the tankers over South Korea and returned to Japan. It was the first use of aerial refueling for an air strike in history. With the tactic proven, Air Force planners started looking for likely targets.

Finally promoted to vice admiral in March 1952, Clark became Commander Seventh Fleet on May 20, 1952. His first act was to confer with the new Commander in Chief Far East (CINCFE), General Mark W. Clark, to advocate strikes against the North Korean hydroelectric complex. The Air Force had been requesting permission for such a campaign for over a year, but the Joint Chiefs had blocked previous requests on the grounds that the generators supplied electricity to China, and because UN forces would need their capability should they again cross the 38th Parallel. While he commanded the UN Forces in Korea as CINCFE, General Ridgway had refused the Air Force pleas to attack the hydroelectric facilities. Admiral Clark argued that since American policy now excluded any further advance into the north, the denial of permission to strike no longer made any sense, while cutting off electrical power in North Korea and Manchuria might create a possibility of progress in the long-stalled Panmunjom peace negotiations. The rejection by the communists of a revised UN peace proposal on April 29, 1952 added to the desire to find some way of breaking the stalemate.

General Clark agreed, and rather than seek permission from Washington for the strikes, he called a press conference where he announced the complexes would be bombed. Rather than contradict their commander on the scene, the Joint Chiefs agreed to the operation. While striking the Suiho complex was initially denied, when it was pointed out that such a strike offered UN forces a way to make trouble in Manchuria without crossing the border, final approval from Washington was quickly obtained.

Since the strikes were considered "strategic," this placed the responsibility for attacking them with the Air Force. However, the B-29s were now limited to night operations only due to the increase in enemy defense capability, and the generators were not targets suited for night attack. Fifth Air Force only had two groups of F-84 Thunderjet fighter-bombers that could safely fly daylight bombing missions in the air combat environment north of Pyongyang, where they were subject to interception by MiG-15s flying out of Antung. Admiral Clark convinced Fifth Air Force commander General Glenn Barcus that daylight dive bombing by Navy Skyraiders was the best method of attack. Barcus accepted the offer.

The North Korean hydroelectric complex was the one important untouched "strategic" target in the country. Suiho, located on the Yalu River in western North Korea, was the fourth largest hydroelectric plant in the world. The generators and their distribution facilities had been built during the Japanese occupation in 1941. The dam was 2,800 feet long, 300 feet thick at the base and 60 feet wide at the crest, and 525 feet high. There were six turbine generators with a capacity of 100,000 kilowatts each. Suiho provided power for western North Korea and the Port Arthur and Dairen regions of northeast China. Dams and generators in what had once been X Corps territory at the Chosin, Fusen, and Kyosen reservoirs produced nearly 400,000 kilowatts for the east coast.

While the four carriers assigned to the Seventh Fleet had been operating in teams of two in the Sea of Japan since January, the operating schedule was overlapped to provide four carriers on station for the first time since December 1950. The plan to strike the Suiho complex would see 36 Skyraiders, escorted by 36 Panthers, depart the carriers in the Sea of Japan and fly across North Korea at low level, in the same manner that had been done with the strikes against the Sinuiju bridges in November 1950. The Navy strike would be followed by a maximum effort by the 49th and 136th Fighter-Bomber Group F-84s and F-80C Shooting Stars of the 8th FBG. The 1st Marine Aircraft Wing was assigned to hit the two generators at the Chosin Reservoir, while the Kyosen plants would be struck by Task Force 77 after the Suiho strike. The generators at Fusen were assigned to both the Navy and Air Force. F-86 Sabres from the 4th and 51st Fighter Interceptor Wings would mount maximum effort patrols in MiG Alley to counter the expected enemy response to the attacks.

Boxer and *Princeton*, already on station, were joined by *Bon Homme Richard* and *Philippine Sea* the morning of June 23,1952. TF 77 commander Admiral Apollo Soucek assigned every Skyraider aboard *Boxer*, *Princeton* and *Philippine Sea* to the mission. Suiho was to be hit at 0930 hours with the carriers launching their strike force at 0800 hours. Preparations for launch were halted at 0730 hours upon receipt of a message that the Air Force was canceling due to a forecast for bad weather over North Korea. By midday, the heavy clouds over the Yalu had moved south and H-Hour was reset for 1600 hours, with aircraft using the heavy broken clouds for cover. At 1410 hours the three carriers commenced launching 35 Skyraiders, each armed with three heavy armor-piercing 1,600lb bombs for a total of 5,000lb each, for the Suiho attack.

The bombers crossed the coast at Mayang-do at 5,000 feet, then flew through the mountains to in order to avoid radar detection. Fifty miles from Suiho, the 35 Panthers that had taken off at 1500 hours overhauled the Skyraiders. When the formation was 18 miles from the target, they climbed to 10,000 feet, with 16 Panthers climbing to 16,000 feet to act as Target Combat Air Patrol (TARCAP) against the expected response by MiG-15s from Antung to counter the strike.

Precisely at 1600 hours, the Panthers struck the gun positions on the Korean side of the Yalu, dropping 250lb high-explosive and 260lb fragmentation bombs. As the Panthers screamed over the gunners, the Skyraiders commenced their dives, releasing their bombs at 3,000 feet and pulling out at 1,000 feet. In the space of two-and-a-half minutes, 81 tons of bombs fell on the complex. The powerhouse, the main target, was set afire and secondary explosions were reported; photographs showed smoke pouring out of the shattered roof. Defending fire was moderate since the defenses had been overwhelmed. There were no losses and the strike aircraft were back aboard the carriers by 1800 hours.

At 1610 hours, while the Navy strikers departed the area, 79 F-84Es of the 49th and 136th groups and 49 8th Fighter-Bomber Group F-80Cs made their attacks, dropping 145 tons of bombs. In MiG Alley, 84 Sabres found no opponents. During the attack, 160 of the 250 MiGs reported at Antung took off and flew into the Manchurian interior, evidently fearing that the strike represented a UN decision to attack their base.

At 1615 hours, the Chosin generators were struck by 75 F9F Panthers, F4U-4 Corsairs and AD-4 Skyraiders from the Marine Aircraft Wing, while a second group of 90 Panthers, Corsairs and Skyraiders from *Princeton* and *Bon Homme Richard* struck the Fusen No. 3 and 4 plants and 52 F-51Ds from the 18th FBG and the South African 2 Squadron hit Fusen No. 1 and 2 plants. Three Corsair squadrons and two Skyraider squadrons, escorted by two Panther squadrons from *Boxer* and *Philippine Sea*, struck Kyosen.

Total losses for the strikes on June 23 were two F-80s of the 8th FBW damaged by flak over Suiho, written off after crashlanding at Taegu; an F4U-4 flown by the squadron commander of *Boxer*'s VF-63 heavily damaged over Kyosen No. 4 successfully ditched with the pilot rescued for the only Navy loss; a *Philippine Sea* Skyraider of VA-115 damaged by flak over Suiho and diverted to K-14 for a wheels-up landing; a *Bon Homme Richard* Skyraider of VA-75 damaged when struck by debris from a bomb explosion over Kyosen No. 3; and a *Philippine Sea* Corsair damaged by flak over Kyosen No. 3 and a second Skyraider hit by small-arms fire at Suiho.

Bomb-damage assessment missions were flown by RF-80Cs of the 45th Tactical Reconnaissance Squadron, F2H-2Ps of VMJ-1 and F9F-2Ps from the carriers. The photos showed heavy damage to the Suiho, Chosin, Fusen, and Kyosen No. 1 and 2 plants. There was a second day of strikes on June 24. That morning, F-84s of the two fighter-bomber groups and Skyraiders from *Bon Homme Richard* totally destroyed the power generator at Suihho. *Princeton*'s Skyraiders and Corsairs struck Fusen, while F-51D Mustangs of the 18th FBG bombed the unscathed Chosin No. 1 and 2 power generators. The Kyosen No. 4 plant was destroyed by aircraft from *Boxer* and *Philippine Sea.*

That afternoon, *Princeton*'s Skyraiders destroyed the Kyosen No. 3 plant. One F4U-4 of VF-192 was hit by flak, with the pilot rescued after ditching offshore by the cruiser *Helena*'s helicopter. The other carriers launched strikes against stations in the power grid at Chungdae-ri, Naemkpang, and Man'gyo-ri, in Kangwon Province, and Yuch-ni, Haeju, Chaeryong, Kaishu, and Chang-yôn in North Hwanghae Province.

After a pause for weather on June 25, F-84s and F-80s bombed the Chosin and Fusen plants over June 26 and 27. Over the four days of strikes, Air Force units flew 730 sorties while the carriers launched 546 sorties. A total of 238 combat air patrol sorties were flown by the 4th and 51st Fighter Wings and kept the MiGs from intervening. Five aircraft were lost: two F4U-4 Corsairs crashed at sea, while three Air Force jets were written off in crash landings at their bases. No pilots were lost.

The hydroelectric strikes resulted in the destruction of 90 percent of North Korean power production capability; 11 of 13 generators were destroyed completely, with major damage to the remaining two. Northeast China lost 23 percent of its electricity and 60 percent of industries in Dairen failed to meet production quotas. The lights were out throughout North Korea for two weeks.

The strikes did not achieve the hoped-for result, however. Technicians were sent from both China and the Soviet Union and over the course of the summer of 1952, generators were repaired and some were rebuilt. Thermoelectric plants were brought on line and by the end of the summer, 10 percent of the prestrike generating capacity had been restored. There was no change of position on the part of Chinese and North Korean negotiators at Panmunjom.

Reaction among European allies, however, was strongly negative, particularly in Britain. Labour Party leaders Clement Attlee and Aneurin Bevan claimed the operation risked World War III, and particularly criticized the fact that there had been no "consultation" between the Churchill government and the Truman administration prior to the strikes. They pointed to the fact that the minister of defence, Lord Harold

Alexander, was in Korea when General Clark first approved the FEAF plan but was not informed of it prior to Clark's public announcement, and left Korea before the JCS approval was received. The Labour leaders called for a vote of censure of Churchill's government, but the censure resolution failed after US Secretary of State Dean Acheson stated that the Truman administration was wrong to have not consulted the British government "as a courtesy." As a result, a British officer was appointed deputy chief of staff to the UN Commander on July 31, 1952.

The reaction in Washington was the opposite from that of London. Congressional critics of the administration questioned why the attacks had taken two years to be approved, since they had proven so successful. Despite the lack of effect on the truce talks, the hydroelectric campaign continued through the rest of 1952 as Navy and Air Force fliers attempted to keep enemy repairs from re-establishing power.

On July 3, Task Force 77, now reduced by one carrier to *Philippine Sea*, *Bon Homme Richard*, and *Boxer*, struck both remaining Kyosen power plants and the three power plants that had not been hit yet at Funei. Kyosen No. 1 was hit solidly by aircraft from *Bon Homme Richard*, but smoke obscured Kyosen No. 2, which was bombed five days later by planes from the same carrier, destroying the powerhouse and the piping delivering water to the turbines. At the same time, F-84s of the 49th FBW bombed the Chosin plants on July 8 with 41 aircraft.

Bon Homme Richard's Air Group Seven hit the Chosin No. 3 plant on July 19 and scored five hits on the transformer yard. They were joined by *Princeton*'s Air Group 19, which bombed Chosin No. 1. The same air groups struck the Chosin plants again the next day and noted a significant increase in defensive antiaircraft fire. Three days later, Air Group Seven struck the thermoelectric plant at Wonsan and completely destroyed it.

On August 6, the men of TF 77 witnessed one of the most terrifying events of the war. At 0616 hours, following the launch of predawn hecklers, the fuel tank of one airplane on *Boxer*'s hangar deck exploded, igniting those nearby, and eventually tossing others onto their backs from the continued explosions as the fire quickly spread. Sixty fully fueled and armed aircraft were ready for launch on the flight deck above. *Boxer*'s commanding officer, Captain Marshall B. Gurney, ordered speed reduced from 30 knots and directed the flight deck crew to respot as many aircraft to the forward flight deck as possible, and to jettison all ordnance over the side.

Below, the fire raced from port to starboard across the hangar deck. As the captain brought the carrier around to starboard to put the wind behind firefighting crews advancing on it from the port side, hangar deck control officer Lt W. J. Norton sent firefighting crews down to the fire on the No. 2 deck edge elevator, with a Skyraider turned so its propeller blast would clear the smoke. In the spreading flames, 63 crewmen were forced to jump over the side; fortunately, all were recovered by the ship's escorts. Engineering personnel were forced to abandon two fire rooms due to smoke entering the compartments through the ventilation system. Throughout the ship, others were trapped below decks by the fire above. The blaze triggered memories of the near-disaster aboard USS *Franklin* (CV-13) in 1945. Crews aboard the escorts watched smoke billow from the stricken carrier.

While considerable doubt existed at this moment as to the crew's ability to control the fire, it was fortunate that electricians and machinist's mates below kept the power on. On the flight deck, all ordnance was quickly jettisoned overboard. Fortunately, the damage control central station was kept in operation though it was threatened by fire, and was able to control the work of the four damage control parties on the hangar deck.

Individual acts of bravery were common. Seaman R. W. Chapman sprayed water over Airman Ralph Finley, who had been knocked unconscious and lay amidst flaming wreckage on the hangar deck. When a lull in the fire happened, Chapman pulled Finley to safety and the two took refuge in the photo lab. Fireman John Lewis, despite not having an oxygen mask, rescued 11 fellow shipmates from below decks before he was overcome by smoke inhalation. Air Group 2's flight surgeon, Lt James Shropshire, was killed alongside corpsmen James Wark and Richard Taylor as they worked over wounded in the midst of the fire.

Five hours after the fire broke out, it was brought under control at the cost of nine dead, 30 injured, and 18 aircraft destroyed. *Boxer* departed for Yokosuka for repair; she would return to the line by the end of the month. Fortunately, this would be the only accident like this during the war.

Bonnie Dick remained in action. Between July 26 and September 21, Air Group Seven bombed the Puryong-up No. 3 transformer on July 26; Koj No. 3 transformer on July 31; Chosin No. 1 on August 1; Kyosen No. 2 on August 3; and Kyosen No. 1 on September 21. They were joined on August 3 by newly arrived Air Task Group 2 (ATG-2) aboard USS *Essex*, which also bombed Kyosen No. 2; ATG-2 then struck Chosin No. 1 and Kyosen No. 1 on August 5. In the 15 missions flown by Task Force 77 during this period, there were no aircraft losses.

Suiho was bombed again the night of September 12–13. The strike force was composed of flak/searchlight suppression flights of B-26 Invaders from the 17th Bomb Group (Light) and aircraft from *Princeton*'s Air Group 19. Four specially modified B-29s used ECM to jam Soviet antiaircraft radars and communications on both sides of the river, while an additional 25 B-29s from the 19th and 307th bomb groups used SHORAN navigation gear to locate and bomb the target. The ECM B-29s were unsuccessful in jamming the defenses and the B-26 flak suppression force only located and attacked eight searchlights, while an F4U-4 of VF-193 fell victim to the defenses. The B-29 mission was marred when an unexpected cold front created icing conditions for some B-29s and caused the loss of one 19th Bomb Group Superfortress that stalled and crashed due to ice on the wings, with a loss of all but one of the crew. When the B-29s arrived over Suiho, they were met by intense flak and one 307th BG aircraft was shot down; the communists claimed this was the victim of a MiG-15, though one survivor stated they were shot down by antiaircraft fire. Flak caught two other B-29s that were forced to make emergency landings at Taegu, and the overall bombing accuracy was dispersed due to the intense defensive reaction.

The North Koreans reported that 500 bombs weighing 250/450/1,000kg were dropped, with three hitting the upper area of the dam, one hitting the part of the turbine room that was previously undamaged, while 50 hit the transformer that had been previously destroyed. Incendiary bombs and napalm were also dropped. However, the dam, the operational turbines, the generators and the other transformers were not damaged.

While the B-29s claimed five hits on the main power plant and three on the transformer yards, photos taken on a recon mission showed the complex still in limited operation, as indicated by the flow of tailrace water from two turbines.

Three more major interservice missions were flown over the course of the summer. On July 11, Operation *Pressure Pump* saw 106 aircraft from *Bonnie Dick*'s Air Group Seven lead a total of 822 Air Force, Marine, and Navy planes from every operational unit in Korea in a strike against 30 defensive gun positions, troop and supply sites, and factories in the North Korean capital, Pyongyang. Task Force 77 was prevented from launching more than one air group due to adverse weather, but the destruction of the targets was extensive, with three of the targets totally destroyed and the remainder badly damaged. Radio Pyongyang went off the air for 48 hours. When it began broadcasting again, the communists stated 1,500 buildings in the capital had been destroyed and 7,000 people killed. The hope that the strike would deal a blow to enemy morale was not realized, however, as the communist negotiators at Panmunjom maintained their boycott.

Another combined Navy-Marine-Air Force effort struck a large west coast supply area on August 20. Nine days later, Pyongyang was hit by the largest air attack of the war. The object of the mission was to give the Chinese and Soviets "food for thought" after it was learned that Chinese prime minister Zhou En-Lai was meeting Soviet leaders in Moscow. Warning leaflets were dropped on the enemy capital on August 28 and 1,802 Air Force, Navy, Marine, British Commonwealth, and ROK aircraft bombed the city the next day. Three strikes were carried out at 0930, 1330 and 1730 hours. *Boxer* and *Essex* launched 216 sorties combined. All targets were heavily damaged, and for all intents and purposes Pyongyang was of no further military value for the rest of the war. But again the bombing had no effect on the communists' attitude at the peace negotiations.

Boxer had arrived in Korea with six F6F-5K Hellcat drones, operated by Guided Missile Unit 90. GMU-90 was a special operational test unit created by the Naval Air Development Unit at NAS Johnsville, Pennsylvania, in early 1952, led by Lt Cdr Larry Kurtz. The drones would be armed with a 1,000lb bomb and guided to their target by AD-2Q Skyraiders of Boxer's VC-35 detachment. Between August 28 and September 2, the Hellcats were launched at North Korean targets including various bridges, tunnels, and powerplants in the Wonsan-Chosin-Hungnam area. The results were considered a failure, with one hit, one abort, and four misses.

What passed for "industrial targets" in North Korea were also hit over the summer campaign, with the aim of hitting targets that had economic importance in China as well as North Korea. The July strikes against the small Funei power generation complex near Musan finished off all power generation within the Navy's zone of operation. On July 29, the lead and zinc mill at Sindok, which exported its product to other communist countries, was 75 percent destroyed by *Princeton*'s Air Group 19, and the magnesite and thermoelectric plants at Kilchu were heavily damaged.

Following the discovery of a build-up of new industry near Aoji in far northeastern North Korea, the Joint Chiefs suspended their rule against air operations within 12 miles of the USSR border for one mission. On September 1, *Essex*, *Boxer*, and *Princeton* hit oil storage facilities and an iron mine at Musan, and destroyed a synthetic oil production facility at Aoji. Additionally, the border town of Hoeryong, where supplies crossed into North Korea from Manchuria, and the Yalu bridge town of Hyesanjin were bombed, along with a munitions factory near Najin. By September 30, every "industrial" target in North Korea that could be found had been hit. Pilots complained they were being sent on missions to "make the rubble bounce." Nothing changed at Panmunjom, though the CIA reported that both China and the Soviet Union were discussing ways to end the war without "loss of face."

In October, the UN negotiators conceded the communists were not going to change their position regarding the forced repatriation of prisoners of war, and that negotiations were stalemated. They announced a recess in the negotiations and stated they would not return until the other side presented "constructive new proposals."

The UN Command attempted to lure communist armed forces into the open with an elaborate hoax to deceive the enemy by leaking information that an amphibious assault on the village of Kojo north of Wonsan was planned, in conjunction with an Eighth Army offensive at the MSR. For a week before the leaked assault date, Navy, Marine and Air Force aircraft struck the area, while the Air Force flew an armada of C-46 and C-119 transports into Taegu to back up the rumored airdrop of the 187th Regimental Combat Team. ComNavFE assembled Joint Amphibious Task Force 7, the largest naval armada seen since World War II, and moved the ships off the east coast of North Korea. On the night of October 14, a two-battalion thrust into enemy territory began, while the next morning at dawn landing craft approached the beaches at Kojo and 32 C-119s approached as though to drop paratroops.

The enemy reaction had not been as strong as hoped, but troop targets were made; between October 9 and 19, FEAF fighter-bombers flew 3,729 sorties against 360 targets, while Task Force 77 launched 3,000 sorties. In the end, Sniper Hill and Triangle Hill north of Kumwha were taken with heavy infantry casualties; communist troops recaptured

Triangle Hill on November 5, while Sniper Hill was only held with massive close air support missions against heavy enemy defensive fire. The talks at Panmunjom remained in recess.

In addition to the hydroelectric campaign, Admiral Clark also changed the kind of attacks the carriers made against enemy supplies. The Navy had long argued that their forces were better employed in strikes along the MSR for direct battlefield support than in the Operation *Strangle* interdiction campaign. During an inspection trip to the front lines, Clark took note of the large UN supply dumps immediately behind the front lines. Figuring the enemy had similar supply dumps, he ordered an extensive series of photo reconnaissance missions immediately behind the enemy's positions along the MSR, which revealed that the communists did indeed store their supplies in the same way the UN forces did. Reasoning that hitting large supply dumps was more productive than hitting individual trucks delivering the supplies, Clark came up with what would be called "the Cherokee Strikes" in honor of his Navy nickname "the Cherokee," which recognized that the admiral, who claimed one-eighth Cherokee ancestry and was an enrolled member of the tribe, was the first senior American officer of Native American ancestry.

On October 5, Admiral Clark's plans for the "Cherokee Strikes" were ready. Task Force 77's main effort would now be centered on the destruction of supplies, artillery, and troops behind the front lines. On October 9, after Seventh Fleet planners had made arrangements with X and IX Corps, 91 carrier-based aircraft struck supply areas just beyond artillery range. The UN troops in the front lines could see the massive secondary explosions and they cheered the strike.

The Cherokee Strikes could not have happened at a more confusing time as regards air-ground coordination. The ground forces had been discontented with the centralized Air Force support procedures, which often delayed or denied air support during fighting, since the beginning of the Korean conflict. The Marines had particularly disliked not being able to access their air support following their transfer to the Main Line of Resistance in January 1951. In June 1951, General Almond had requested a re-examination of the system. Eighth Army commander General Van Fleet had tried to persuade Fifth Air Force to put the P-51 fighter-bomber groups under Army control in order to obtain more direct support, and had subsequently asked CINCFE to explore the advantages of decentralizing control of the UN air forces.

The issues were unresolved when General Ridgway departed, and the problems were inherited by General Clark. On August 11, 1952, a conference was held at CINCFE headquarters regarding the air support issue. Army commanders requested they be given control of air support assets as the Marines Division had controlled the Marine Air Wing during the 1950 campaign. The Air Force, which was extremely defensive of its newfound independence of the Army, was opposed to these suggestions, with the result that no change happened. Thus, the Cherokee Strikes, which involved direct arrangements being made with Corps commanders on the front line, differed from both the Marine concept of control of air support and the centralized and highly bureaucratic Air Force system. The Air Force did not like the fact these strikes were not under the control of the Joint Operations Center.

Following a joint services meeting on November 17, control procedures were worked out that pushed the Cherokee Strikes beyond the bomb line behind the MSR, putting them bureaucratically into the category of "deep" or "general" support and thus removing the issue of JOC control. The first series of strikes lasted from October 1952 through January 1953, and absorbed nearly 40 percent of the total Seventh Fleet air effort. Large missions resulted in a high bomb tonnage rate, and many secondary explosions were recorded during the missions. One carrier division commander commented, "the strikes can't help but be doing a lot of damage." This was certainly the case, but bomb damage assessment was difficult.

Over the last ten months of combat, any verdict on the results of these missions was largely a matter of faith. The close air support control system by JOC was unable to handle a large-scale effort in close proximity to UN forces, while enemy air defenses made deliberate individual attacks of the type traditionally associated with close air support much more costly than before. By the end of 1952, there were more than 2,000 of the heavy 85mm and 76mm guns throughout North Korea.

By the latter part of 1952, even the most ardent protagonists had tacitly abandoned Operation *Strangle* in light of diminishing returns coupled with higher losses. The "industrial" and "strategic" targets struck during the summer and fall of 1952 were no longer viable targets, and their destruction had not degraded the enemy's performance on the battlefield or his position at the conference table. The carrier air groups were reduced to dumping as many explosives as possible in the general vicinity of the MLR, with volume of effort substituted for accuracy. The only dividend everyone could agree on was that the morale of the troops on the front line was boosted by the noise of the bombing and the smoke they could see rising as they huddled in their dug-in positions.

Subsequent "Cherokee Strikes" in 1953 would greatly increase bomb tonnage statistics, though specific success would remain difficult to judge. One unfortunate aspect of these strikes was that they were flown as level bombing missions from higher altitude where the planes and pilots were not subject to such intensive antiaircraft fire, but pilots' individual skill in ground attack withered; this would become of crucial importance in the final months of the war when the communists moved out onto the battlefield to grab territory.

Over the course of 1952, the makeup of the naval air forces changed from one made up primarily of propeller-driven aircraft to one with a major increase in jet squadrons. In 1951, TF 77 had averaged 3,300 sorties per month, with the ratio of jets-to-prop being 1:2; by the end of 1952, the force averaged 4,000 sorties per month, with a jets-to-prop ratio of 2:3. February 1953 would see 4,500 sorties flown for the month, with a jets-to-prop ratio of 1:1.

The last six months of 1952 had seen a hard-fought political campaign in the United States for the presidency. The Republican Party had chosen General Dwight D. Eisenhower, who had commanded the Allied forces in Europe that had finally defeated Nazi Germany. Eisenhower stated during the campaign that "if elected, I shall go to Korea." While he said nothing of what exactly he would do while there, or what policy he would pursue that was different from that of the outgoing Truman administration, a million ex-GIs and their families were able to believe that the general who had led them to victory could lead them out of the stalemate that existed in Korea. Eisenhower's victory over Democratic candidate Adlai Stevenson meant that something different would happen after January 20, 1952, though no one could say exactly what that was.

As the new year of 1953 dawned, the limits of air power to decisively affect the outcome of a war like that in Korea had been reached. There was apparently no target in North Korea that could be bombed that would pressure the communists to change their position at Panmunjom.

CHAPTER 16

THE WEST COAST

While Task Force 77 operated almost exclusively in the Sea of Japan, which was deep enough to allow the large carriers to maneuver freely off Korea's east coast as close as 50 miles offshore, operations in the Yellow Sea off the Korean west coast were constricted due to the shallow seabed. Korean geography allowed Air Force fighter-bombers based at Seoul and Suwon to range up to the Manchurian border on the western side of the Taebaek Mountains; thus the need for naval air operations was different from the situation in eastern Korea.

After *Badoeng Strait* and *Sicily* left the Yellow Sea on January 7, 1951 in the wake of the UN evacuation of Inchon, off-loading their squadrons to Korean shore bases and subsequently sailing to the United States, carrier operations off the west coast did not halt. *Triumph*'s support of the blockading force prior to Inchon, and the work by *Theseus* during the period of the Chinese entry into the war and the UN retreat from North Korea, had demonstrated a need for carrier aircraft operating from a ship nearby to enforce the blockade of North Korea, provide air support to UN forces on the western end of the Main Line of Resistance, interdict transportation from Pyongyang, and undertake naval gunfire spotting for the bombardment group.

The Royal Navy's light fleet carriers were perfect for this work. Initially designed in 1942, these carriers were approximately similar in size and role to the US Navy's light carriers (CVL), the difference being that while the US carriers were built on cruiser hulls and had greater similarity to an escort carrier than a fleet carrier, the British light fleet carriers were designed as such from the outset. The overall design was heavily influenced by the design staff at Vickers-Armstrong and as such was effectively a scaled-down *Illustrious* fleet carrier. They did have one thing in common with the US Navy's CVLs in that their propulsion machinery was taken from canceled cruisers. At an all-up weight of 18,040 tons and a flight deck 680 feet long by 80 feet wide, they were some 50 percent larger than the American light carriers.

Sixteen of these ships were ordered as the *Colossus* class; while all were laid down, only eight were completed to this design, including HMS *Triumph*. Though launched and commissioned before the end of the war, none saw front-line service. Two others were finished as aircraft maintenance carriers, maintaining replacement aircraft for carriers serving on the front line and repairing aircraft from those ships. Five of the remaining six carriers were completed as the *Majestic* class postwar, being modified and strengthened to enable operation of larger and faster aircraft. None of these five carriers ever saw service with the Royal Navy, though one – HMAS *Sydney* – did deploy to Korea.

The *Colossus*-class carriers *Triumph*, *Glory*, *Ocean* and *Theseus*, along with HMAS *Sydney*, provided the Royal Navy's contribution to naval air warfare in Korea. They operated air groups of 48 aircraft, a fighter squadron of 22–24 aircraft and a light attack squadron of 24–26. Other than *Triumph*, which operated obsolete Seafire 45 fighters and Firefly FR I light attack aircraft, the air groups of the other carriers operated the Hawker Sea Fury F.B.11 and Firefly FR Mk IV and V light attack aircraft.

Had the Hawker Sea Fury arrived on the scene one year earlier than it did, its place in aviation history would be assured by the outstanding combat record it would have undoubtedly achieved with the British Pacific Fleet in 1945.

As it was, the Sea Fury did not arrive in operational squadrons until 1947, by which time it was clearly outclassed as an air superiority fighter by jets. Regardless, the Sea Fury was the penultimate result of Sir Sidney Camm's philosophy of piston-engine fighter design and is easily one of the most beautiful piston-engined fighters ever flown.

The airplane began life in 1942 as a request by the Air Ministry that Hawker Aircraft design a long-range fighter to operate in the Far East. While a radial-engine version of the Tempest was under development, it was felt the relatively high wing-loading of the Tempest would be ill-suited for combat with lightly loaded Japanese fighters. Thus, the Sea Fury began as the "Tempest Light Fighter (Centaurus)."

Specification F.2/42 was issued around the "Tempest Light Fighter" proposal, followed by Specification F.2/43 in May 1943, which required a rate of climb of not less than 4,500ft/min from ground level to 20,000 feet, good maneuverability and a maximum speed of at least 450mph at 22,000 feet. Armament was set at four 20mm Hispano V cannon with a total capacity of 600 rounds, plus two bombs each up to 1,000lb. In April 1943, the Admiralty issued Specification N.7/43 for a navalized version. In early 1944, the aircraft was finally named, the RAF fighter becoming the Fury, while the FAA's fighter was the Sea Fury.

The first Fury prototype was NX798, powered by a Centaurus XII with rigid engine mounts, mounting a Rotol four-blade propeller; it flew on September 1, 1944. SR661, the Sea Fury prototype, first flew February 21, 1945. The RAF's order for the Fury was canceled before any production examples were built due to the coming end of the war. Development of the Sea Fury continued, since it was superior to any other British carrier-based fighter and a suitable replacement for US Lend-Lease aircraft that would be returned after the war.

SR666, the second prototype, flew October 12, 1945, powered by a Centaurus XV that turned a new, five-bladed Rotol propeller that allowed takeoff and landing at lower revs and eliminated the tendency to swing when power was applied. It had folding wings. The rigid engine mounts created vibration difficulty until they were replaced with dynafocal-base mounts, which completely eliminated the vibration at lower speeds that had hampered the airplane's ability to land aboard ship. SR661 soon received a five-bladed Rotol prop, since tests with SR666 had shown adequate power for landing and takeoff could be achieved at lower revs with the five-bladed prop, which ended the tendency to swing when power was applied due to torque. The aircraft entered production in March 1947 with 50 F Mk X Sea Furies. Following successful completion of weapons trials at the A&AEE Boscombe Down, the Sea Fury was cleared for operational use on July 31, 1947. Further development resulted in the more capable Sea Fury Mk 11, which became the Sea Fury FB 11 in recognition of its primary role as a fighter-bomber. Most notable among several improvements was the hydraulically powered wing-folding mechanism, which eased flight deck operations, and the adoption of rockets for the fighter-bomber role. The FB 11 entered squadron service in late 1949.

The other aircraft that flew from British decks during the Korean War was a development of the original Firefly I, which had first entered service in 1944 and had proven itself the best British-designed carrier strike aircraft of the war. With the need to get rid of the US carrier aircraft provided under Lend-Lease at the end of the war, the Firefly acquired new importance as it was the only carrier-based strike aircraft available to the Fleet Air Arm.

Postwar, a more extensive redesign around the more powerful Griffon 72 engine was undertaken, which resulted in the Firefly IV, in which the radiators were moved from their drag-inducing position in the nose beneath the engine to the inner leading edges of the wings, thus allowing a more streamlined nose. This new version used the Griffon 74, which gave 2,100hp at sea level, compared to the 1,735hp available from the Griffon II and XII used in the Firefly I. This allowed maximum weight to be raised 1,000lb and still provide a 40mph increase in maximum speed, to 345mph at 12,500 feet. The wingtips were clipped to improve roll rate, though total wing area remained the same with the increase at the wing roots for the radiators. The ASH radar used by the NFI was located in a small nacelle under the starboard wing, with an auxiliary fuel tank of similar size and shape under the port wing to preserve symmetry. Flight tests in 1945 revealed a need for a four-blade prop to absorb the increased power and an enlarged vertical fin and rudder to preserve stability.

Production of 120 FR (Fighter/Reconnaissance) Mk IVs began in August 1944 with 30 FR Mk IV and 23 Night Fighter Mk IV Fireflies, with another 67 FR Mk IVs ordered that November. While the first production Firefly IV flew May 25, 1945, production wind-down after the war saw the first Mk IV delivered in September 1946. The first two fleet squadrons, 810 and 825, were declared operational in September 1947.

Further development resulted in the visually virtually identical Firefly Mk V, a "universal" airframe that could be used in fighter-reconnaissance, night-fighter, or antisubmarine roles. Its first flight was December 12, 1947. Production of an eventual 352 Mk Firefly Vs began with modification of a contract for 117 Firefly IVs, which began delivery in January 1948 and ended in May 1950.

Due to the extra power of the Griffon 74, Firefly IVs and Vs could carry underwing ordnance loads of 2,000lb per aircraft. While this was light compared to the load-carrying capability of the Skyraider, it was a significant load when flying off a light fleet carrier without aid of a catapult, and was similar to the load carried by the Corsair. The Firefly was so reliable it could fly up to three sorties per day per aircraft from a carrier, often in extremely adverse weather. The record number of 123 total sorties flown in a single day by HMS *Ocean* on May 17, 1952 included 47 flown by 825 Squadron's Fireflies. Between May and the end of October 1952, 825 Squadron flew 1,907 sorties in 3,243 flying hours; in 1,948 deck landings, there were only four accidents. A total of 16,868 rockets were fired and 96,500lb of bombs dropped.

The operations cycle for carriers assigned to Task Element 95.11 was a two-day trip from Sasebo to the Yellow Sea, ten days on the line, two days' return to Sasebo and six in harbor for repair and resupply. Following the end of the Chosin campaign, the Royal Navy carrier operating off the west coast of Korea would trade tours with whichever American CVE or CVL was deployed to Korea. Pilot Russ Mallace of 802 Squadron remembered, "Our carriers were usually stationed about 60 miles southwest of Haeju and operated with a screen of six destroyers and similar ships that alternated with other duties."

Following the departure of HMS *Triumph* after the Inchon invasion, her place was taken by HMS *Theseus*, operating the Sea Fury FB.11s of 807 Squadron and the Firefly FR.Vs of 810 Squadron. *Theseus*' first tour began on October 9, 1950 and she concluded her final tour on April 18, 1951, when she departed for Hong Kong on her return to Britain. HMS *Glory* arrived on station off Korea on April 20 with the Sea Furies of 804 Squadron and the Fireflies of 812 Squadron. *Glory* would remain in the Far East until May 1952, serving two Korean deployments between April – September 1951 and January – May 1952, with the Royal Australian Navy's HMAS *Sydney* taking her place between September 1951 and January 1952 operating Sea Furies from 805 and 808 squadrons and Fireflies from 817 Squadron. Following *Glory*'s second Korean deployment, her place was taken by HMS *Ocean* flying the Sea Furies of 802 Squadron and the Fireflies of 825 Squadron from May to October 1952. *Glory* returned in October for a record third Korean deployment with Sea Furies of 801 Squadron and Fireflies of 821 Squadron until May 1953. *Ocean* made the final Royal Navy deployment of the war, with Sea Furies of 807 Squadron and Fireflies of 810 for that air group's second Korean tour.

The Sea Fury saw its first combat operation on October 10, 1950, when four of the Hawker fighters led by Air Group Commander Lt Cdr Fred Stovin-Bradford attacked an ammunition dump south of Chinampo. The group commander's wingman, Lt Stanley Leonard, was hit by flak on his attack run and crashlanded in a rice paddy, breaking his back in the crash. The three Sea Furies above kept North Korean troops at bay until an HO3S-1 from Cho-do Island arrived and rescued Leonard while the Sea Furies strafed the enemy. During the UN retreat out of North Korea following the intervention of Chinese forces, the two Fleet Air Arm squadrons provided cover for Eighth Army units in the retreat out of western North Korea.

Sea Fury pilot Lt Alan "Spiv" Leahy of 801 Squadron had a close escape on December 18, 1952 during a strike flown from *Glory* during her second Korean deployment. As he dive-bombed a rail line, he heard a loud "bang!" as a large hole appeared in the left wing. He glanced back and saw his left horizontal stabilizer was also damaged. His wingman told him the Sea Fury had several other holes in the airframe. They were 50 miles inland at the time, and the nearest friendly place to set down was on the narrow emergency strip at Paengyong-do Island. Leahy found the airplane was still controllable despite the damage, and he headed toward the island after calling a "Mayday." En route, he tried an approach speed handling check to ensure the airplane could be landed. When he set it down, the Sea Fury took the whole distance of the short runway to come to a stop.

One problem faced by Sea Fury pilots aboard the British carriers was described by 802's Sub-Lt Russ Mallace:

> To fly, a Sea Fury needs 90 knots of airflow over the wings. So with the ship doing 22 knots in calm air you would just about have enough airflow over the wings to get airborne. The ship always turned into wind to launch and recover aircraft, but the name Korea means "Land of the Morning Calm," so windless mornings were not uncommon. With 1,000lb bombs mounted, more like 95 knots was needed, so RATOG (rocket assisted take off) was used instead of the catapult. Rockets were attached to the underside of the aircraft and the takeoff run was started from the stern of the ship. At a predetermined point on the takeoff run you would fire the rockets and heigh-ho you hopefully found yourself up in the air. All good fair-ground stuff! The rocket carriers were jettisoned after takeoff.

Timing the firing of the rocket pack by the pilot was crucial. The rockets were not reliable, and more than one pilot found discovered himself with full throttle and brakes off trundling down the deck with a rocket misfire, which meant going in the water, since the rocket-firing point was too close to the bow to allow an aborted takeoff.

There were also accidents with the catapult, as Sub-Lt Peter Sheppard (who would later demonstrate the Sea Fury of the Royal Navy Historic Flight in the 1970s) found on March 30, 1953 during his first catapult takeoff aboard *Ocean*. Just as he reached full power, the holdback strop on the catapult gear broke and his Sea Fury roared down the deck and right into the water. He was just able to scramble clear as the airplane sank and the ship swept past 50 yards away.

HMAS *Sydney*, the Australian Navy's first aircraft carrier, arrived in September for a four-month Korean deployment. On October 26, a flight of five Fireflies from 817 Squadron unsuccessfully attempted to block a railway tunnel between Chaeryong and Haeju. The Firefly flown by Sub-Lt Neil MacMillan and Chief Petty Officer Phillip Hancox was hit by defensive fire and made a forced landing in a frozen rice paddy 50 miles behind enemy lines. Enemy troops were in the vicinity, and the two fliers held them off with a submachine gun they carried, while a flight of 805 Squadron Sea Furies remained overhead and kept the North Koreans at bay.

Sydney launched her HO3S-1 loaned by the US Navy in answer to the Mayday call. The crash site was 110 miles distant and it would take the helicopter, flown by Chief Naval Aviation Pilot Arlene "Dick" Babbit, over an hour to reach the downed fliers. A call was put out for assistance and four Meteor jet fighters flown by the RAAF's 77 Squadron were diverted from their mission to provide additional support. The rocket-armed Meteors made runs on the surrounding enemy troops and kept their heads down, but were finally forced to depart due to low fuel state, leaving the two fliers alone in enemy territory. Finally, as the sun was setting, the helicopter arrived and MacMillan and Hancox were picked up. Chief NAP Babbit was awarded both the Commonwealth Distinguished Service Medal and the American Navy Cross for the rescue, giving him the distinction of being the only Allied serviceman during the Korean War to receive awards from two countries for the same action.

Sydney spent 64 days in the operational area as the British Commonwealth carrier of TE 95.1.1. Of these 64 days, ten involved replenishment or passage around the peninsula between the west and east coasts. Twelve flying days were canceled due to bad weather. During those 42 days of flying, 2,366 sorties were flown with an average daily sortie rate of 55.2. Ammunition expenditure during seven patrols was 269,249 20mm rounds, 6,359 rocket projectiles, and 902 1,000lb and 500lb bombs. When the carrier departed Korea on January 25, 1952, she had made seven patrols in the 118 days she had been deployed in the area of operations. Ten Sea Furies and Fireflies had been shot down and many damaged by flak. Casualties included one killed, two missing and six wounded. *Sydney*'s record was exemplary of the other Commonwealth carriers when they deployed to Korea.

August 1952 saw the Anting-based MiG-15s evade the Sabre patrols at the Yalu and penetrate into North Korea to go after the slower piston-engine fighter-bombers. During the sixth tour of her first Korean deployment, *Ocean*'s fliers had seen contrails high overhead over the last week in July, and on August 1 enemy jets had approached a formation of Fireflies but made no move to attack.

The next day, eight MiG-15s hit a mixed strike force of Sea Furies of 802 and Fireflies from 825 Squadron. Acting 802 squadron commander Lt Peter "Hoagy" Carmichael led Blue flight on escort with element leader Lt Peter Davis and wingmen sub-lieutenants Carl Haines and Brian "Smoo" Ellis. In the enemy's first pass, a Firefly was blown apart when it was hit by fire from the two 23mm and one 37mm cannon carried by the attacking MiG. The enemy fighters sped away as "Smoo" Ellis called the break and the Sea Fury pilots turned to give support to their comrades. One MiG slowed as it maneuvered around for a second attack, with the others also returning. Carmichael later recounted:

> We all turned towards the MiGs and commenced a scissors. It soon became apparent that four MiGs were after each two-plane Fury element, but by continuing our break turns we presented impossible targets. One MiG came at me head on and I saw his tracers. I fired a burst and he flashed past me.

Sub-Lt Haines got in a burst before the enemy fighter broke and went after Davis' pair. The Sea Fury pilots put their throttles "through the gate" to chase this slower jet and a second MiG turned back to help his comrade. Both MiGs were hit when the Sea Furies opened fire, and one crashed. At the time, Carmichael was credited with the kill, the first MiG shot down by a pilot of a piston-engine fighter and the only victory by a Fleet Air Arm pilot after World War II until the Falklands War. However, extensive review of the record has now resulted in official credit for this victory being awarded in September 2017 to Sub-Lt Ellis.

On August 3, another eight-jet formation went after the Sea Furies. The British pilots were able to save themselves by using their superior maneuverability at what was a low speed for the jets, pulling tight high-G maneuvers and taking advantage of cloud cover. One MiG was claimed damaged. Pilot Russ Mallace of 802 Squadron recalled, "We had blithely assumed that the US Air Force Sabre jet fighters were keeping the MiGs busy, but due to restricted engine hours they were only flying fighter sweeps up to the Yalu River on Tuesday and Thursday afternoons. We restricted how far north we flew until the normal pattern resumed."

The record for individual missions in the Firefly during a Korean deployment went to Lt J. F. K. "Sean" McGrail of 821 Squadron, who flew 118 missions from *Glory* between November 1952 and May 1953. The record number of 123 total sorties flown in a single day by *Ocean*'s air group on May 17, 1952 included 47 by 825 Squadron's Fireflies. Between May and the end of October 1952, 825 Squadron flew 1,907 sorties in 3,243 flying hours with only four accidents in 1,948 deck landings, while 16,868 rockets were fired and 96,500lb of bombs dropped. For this performance, 825 was awarded the Body Trophy for 1952 along with their shipmates from 802 Squadron.

Following the departure of *Sicily* and *Badoeng Strait*, in January 1951, USS *Bataan* (CVL-29) was assigned to TC 95.11, operating 24 F4U-4 Corsairs of either VMF-323 or 312. When trading assignments on the carrier, the two squadrons would swap aircraft, with the carrier-based squadron operating F4U-4s armed with machine guns while the shore-based squadron operated F4U-4Bs armed with 20mm cannon. The reason for this lay in the fact that the cannon were difficult to service and arm when the wings were folded, while the machine guns were not. Aboard the carriers, it was not possible due to space limitations to service the Corsairs on the cramped hangar decks without their wings being folded.

One of the few opportunities for the Marines to engage in air combat occurred during VMF-312's second tour aboard *Bataan* on April 21, 1951. Captain Phil DeLong, an 11-victory World War II ace who had made his reputation flying with VMF-212 in the Solomons in 1943, was leading a division of Checkerboard squadron, so called for their distinctive unit marking of a white checkerboard around the engine cowling.

On April 21 the squadron put forth a maximum effort, with the 24 Corsairs flying 42 sorties, including nine armed reconnaissance missions. DeLong's division was headed for targets in Chinampo, southwest of the North Korean capital of Pyongyang. Just as they went "feet dry," at 0645 hours, 1st Lt Godbey reported engine trouble, and soon after was forced to bail out. DeLong notified Bataan of a need for the helicopter, and minutes later a section of F4Us arrived to CAP Godbey until the rescue chopper arrived.

DeLong and his wingman, 1st Lt Harry Daigh, headed on toward the target. DeLong later recalled the fight that developed.

> We were climbing to altitude over Hojong-do and had reached about 2,000 feet when we both spotted four aircraft approaching from the northwest at 5,000 feet. At that moment, I had just pulled out my maps and had them spread all across my lap. Daigh called the approaching aircraft out to me as US Air Force F-51s.
>
> Believing the four fighters to be friendly, I didn't pay any attention to them as they made a right turn toward me from 10 o'clock in a loose right-echelon formation. I quickly became aware that they were *not* friendly aircraft when a 7.7mm bullet fired by one of them entered my cockpit and slightly damaged my radio. Other bullets also hit my airplane. It was then that I realized the four were in fact Communist piston-engine Yak-3, or maybe Yak-9, fighters.
>
> While attacking me, the enemy pilots evidently had not spotted Daigh, who pulled in behind the last two Yaks. At this point, Daigh tried and failed to release his bombs.
>
> Despite the heavy external load, he dived to the left and below the number-three Yak, made a climbing 360-degree turn, and opened fire on both of the rear enemy aircraft with unobserved results. Then he turned on another Yak that was at his 4 o'clock, opened fire, and hit it in the tail, fuselage, and wing. This Yak's starboard wing broke off and the aircraft crashed and burned.
>
> Meanwhile, as soon as I was fired on, I executed a very quick split-S to pick up speed. I had a cockpit full of loose maps, which

didn't help visibility, and I had to get rid of them before I could recover from the split-S. This was one of the more tense moments of the mission, considering that I had started the split-S at about 2,000 feet in a fully loaded F4U. I did collect the maps, recovered from the dive, and made a climbing turn to the left.

Two of the Yaks attacked me again from astern, but I was able to turn the tables. While I was still in my defensive turn, one of the enemy aircraft crossed in front of me from right to left. At this instant, I saw Daigh's first victim crash.

Returning my full attention to the Yak in front of me, I hit it with a solid burst of .50-caliber bullets and sent it streaming smoke to the ground. It crashed and burned about a half-mile from Daigh's kill. It was only then that I had an opportunity to jettison my bombs. I thought about salvoing the 5-inch rockets, too, but I decided against that; I thought I might be able to use them against the remaining Yaks.

I next turned to my left – eastward – and immediately spotted two Yaks in front of me, heading in the same direction. Daigh was pursuing one of them, but the second was behind Daigh, turning right onto his tail. I radioed a warning for Daigh to pull out, and he made a quick turn to the left and opened fire on the rear Yak as it overran him. It began smoking from the cockpit and wing areas.

As I came up on the lead Yak (the one Daigh had been trailing), I opened fire and started it smoking with the first burst of .50-caliber. It turned to the south, split-essed, and recovered to the west. I followed it through the split-S and continued to score hits. The Yak was smoking from its wings and fuselage, pieces of it were falling away, and the pilot stopped using evasion tactics. I knew I had him.

I still had my six 5-inch HVARs (high-velocity aviation rockets), which I thought might be effective as air-to-air missiles. I selected the rocket launchers, hit the switch … and nothing happened. So I gave the Yak another burst of .50-calibers, and more parts fell off. I reselected the rockets, hit the switch again … and nothing happened. I tried to salvo the whole load, but still nothing happened, so I gave the Yak another burst of .50-calibers.

Suddenly, papers flew from the Yak's cockpit as the pilot jettisoned his hood and bailed out. The Yak crashed into the ocean and its pilot descended much more slowly to the water, apparently unhurt.

> Daigh and I joined up, climbed to about 6,000 feet, and orbited the enemy pilot's position. I called to the *Bataan*'s combat air patrol that the helicopter sent to rescue Lt Godbey should also pick up the enemy airman. It was my intention to wait for the rescue helicopter, but we had orbited for only about ten minutes when Daigh's plane developed a rough engine. I had smoke in my cockpit, so we headed south to find the *Bataan*.
>
> They wouldn't let me aboard with six 5-inch rockets on my Corsair. The ordnance officer advised me by radio that they had rewired the rocket circuit on my F4U the night before and installed a new switch to activate the rockets. With this information, I was able to jettison the rockets and land aboard the *Bataan* at 0820. But think of the possibility I had had of shooting down an enemy aircraft with an air-to-ground rocket!

In less than three minutes, the two Corsair pilots had shot down three North Korean fighters and damaged a fourth. Two days later, pilots from the Checkerboards spotted a North Korean pilot 20 miles north of the combat site; he was likely the pilot of the fourth Yak, though full credit for its destruction was never confirmed.

Godbey was rescued by South Korean troops and returned to *Bataan* by helicopter. Over the next three days, VMF-312 flew 128 sorties – strike, recon, CAP, close air support and RESCAP – with only three aborts. The pace of operations was considered "unremarkable" at the time.

In the face of this potential threat, MAG-12's commander Colonel George "Big Ax" Axtell, who had gained fame serving with VMF-323 "Death Rattlers" on Okinawa in 1945, put the squadron – now known as VMA-312 (Marine Attack Squadron) in recognition of their primary role as fighter-bombers – through training in how to fight the faster, better-climbing Soviet jet while they were "off operations" at Itami AFB in Japan. *Bataan* had departed from her second Korean deployment at the end of July and her place had been taken by the veteran *Sicily*. The Checkerboards went aboard her on September 2 for their second tour aboard the CVE.

Five days after arrival on station, September 7, a flight of Checkerboards on an armed recon mission north of the Taedong Estuary were advised by "Postcard," the radar station located on Cho-do Island, that bogies were high overhead. A minute later the Corsair pilots were advised the enemy had split into two groups, obviously with the intent of bracketing the Marines. They immediately went into what was known in World War II as the "Thach Weave," a tactic to defend against a faster and more maneuverable enemy. The enemy apparently saw the Marines were not to be surprised and turned north without attacking.

On September 9, two flights of Corsairs that were returning to the ship having made their attacks against communist shipping at the port of Chinampo spotted four MiG-15s closing from over the Yellow Sea. Two enemy jets closed and were met by a section of Corsairs that turned into them. When the MiGs climbed upsun, the four Marines dove for the deck and headed for Cho-do. The enemy jets split to either side of the American formation but made no further move. The Corsairs were at 1,000 feet when they arrived over Cho-do, at which point the communist pilots turned north.

Things got serious the next day. Captain Jesse G. Folmar and 1st Lt Willie L. Daniels were launched at 1610 hours to attack 300 North Korean troops that had been located on the southern side of the Taedong River. At the same time, a four-plane TARCAP (Target Combat Air Patrol) flight was launched. Folmar was flying a cannon-armed F4U-4B while Daniels flew an F4AU-4 equipped with machine guns. Over the Taedong Estuary, they dove from 10,000 feet to 8,000 to explore the area before attacking the designated target. With the previous MiG encounters in mind, the two pilots were flying a defensive weave. Just as Folmar began a turn in his weave while the two were three miles south of US-occupied Sock-To Island, he spotted a pair of MiG-15s closing on the two Corsairs.

Folmar called "Tally-ho! Bandits!" as he jettisoned ordnance and drop tank, then called for help on the guard channel, announcing he and his wingman were engaged. The two Corsairs turned toward the threat, maintaining their weave to cover each other. Daniels glanced over in time to see a MiG closing on Folmar from astern and continued his weave into the enemy fighter, where he opened fire in a fast head-on pass. The enemy pilot turned left and disengaged. Daniels reversed his turn and completed his weave, which now positioned him off his leader's starboard beam.

As Daniels executed his move, Folmar spotted two more MiGs closing rapidly from eight o'clock. He pulled the stick back hard and threw it over, putting the Corsair into a steep left turn as he tried to put one jet in his sights before the others opened fire. The deflection was too large and the closing speed was too fast to tighten the turn. Tracers ahead told him the enemy behind had over-deflected his shot.

Folmar then saw one MiG pass between him and his wingman. Throwing his fighter into a steep right bank, he found the enemy jet momentarily vulnerable, in a steep climbing left turn. "I pulled up, got him in my gunsight, gave him about 20 mils lead and held a five-second burst. I could tell I had him boresighted by the blinking flashes along the left side of the fuselage." The jet emitted a stream of gray smoke that quickly turned black as it caught fire. The MiG pitched down and slowed as the enemy pilot ejected in a cloud of smoke. When his parachute opened, both Folmar and Daniels saw his G-suit was afire. The burning MiG hit the water 7,000 feet below in a vertical dive.

The fight wasn't over. The two Marines resumed their weave and quickly spotted four more MiGs diving on them in a loose column. The three of the original flight that had attacked them remained in the fight, making ineffective side passes, while the new foursome pressed their attack. As one came in on Folmar from six o'clock high, Daniels screamed, "There's one on your tail!" He weaved toward the attacker and fired a burst as the enemy passed ahead of the two Corsairs and sped out of range.

Facing odds of 7-2, Folmar decided it was time to run away and live to fight another day. He called "Break hard left, down." The two blue fighters dove for the estuary in a 35-degree dive. Folmar quickly discovered this wouldn't get him out of trouble when he saw tracers pass to his left and the Corsair's left wing took 37mm hits that knocked off the aileron and four feet of the outer wing, stripping the fabric covering atop the rest of the wing as far as the inboard cannon. Folmar managed to maintain control as his fighter tried to roll left. A second MiG closed in but Daniels weaved into it and forced it to break off with a well-aimed burst of machine-gun fire.

Even holding full right stick, Folmar's Corsair quickly became uncontrollable. He radioed "Mayday!" and gave his position, then slid back the big bubble canopy and unfastened his harness. At around 2,700 feet, he rolled to inverted and fell out. Pulling his ripcord, "I heard an earsplitting cracking sound and I saw another MiG fly by me at very close range, guns blazing at my now-spinning Corsair." American AA on nearby Sock-To Island opened up and the seven enemy jets flew off to the northeast as Folmar went into the water a quarter-mile offshore. The entire event had taken place in less than eight minutes, and Captain Folmar was pulled from the water of the estuary onto a landing craft seven minutes after he bailed out.

Having lost one of their jets, the communists were not so aggressive, though "bandit tracks" were seen on several occasions by UN aircraft over Pyongyang. On September 29, the Checkerboards were back for their third *Sicily* tour when a division attacking targets in the vicinity of Chinampo spotted four MiGs diving on them out of the sun and managed to break hard right just before the enemy opened fire. Before the MiGs could organize a second pass, the Marines dived behind the cover of a nearby ridgeline and stayed low until they saw the MiGs depart to the north.

Jesse Folmar was the only American to shoot down a MiG-15 while flying a piston-engine fighter. The fight demonstrated that a sharp lookout, flying skill and teamwork could defeat the enormous advantages the enemy had, but it was also clear his victory was fortuitous.

Throughout the Korean War, the UN forces were keen to get their hands on a MiG-15 to learn its technical secrets. An opportunity to get hold of a crashed MiG presented itself in July 1951. With the Soviet pilots forbidden to fly into southern North Korea where there was any possibility of UN forces getting hold of the body if an accident should happen or a plane be shot down, thus allowing them to prove claims of direct Soviet involvement in the fighting, it was difficult to obtain a crashed example. When one had been reported down on the sandbars of the Yalu Gulf, US Navy ships had ventured close despite the nearness of the Soviet base at Port Arthur, though the search proved fruitless.

A crashed MiG-15 was spotted in the shoals off the mouth of the Chongchon River north of Pyongyang, and the Joint Operations Center informed Task Force 95 of the discovery on July 9, 1951. USS *Sicily*, which had returned to Korea on her second deployment and relieved *Bataan* the month before, was on station with VMF-312's Corsairs and was given the assignment to search for the enemy jet. Unfortunately, the weather was foggy and the reported position was 15 miles in error. With the MiG awash and only visible at low tide, the Marines were unable to find it. HMS *Glory*, which arrived in the Yellow

Sea on July 10 to relieve *Sicily*, joined the American carrier and both ships continued the search.

On July 11, aircraft from *Glory* spotted the MiG two miles offshore, 33 miles north of the Taedong Estuary. The main MiG base at Antung was less than ten minutes' flight time from the position, creating a risk of exposure and communist attack. The shoals made it difficult for a ship large enough to recover the prize to maneuver. Photos showed that recovery might be possible, however, and ComNavFE ordered an all-out effort to recover the enemy jet.

Task Force 95 sent an LSU equipped with a special crane to Cho-do Island aboard USS *Whetstone* (LSD-27) on July 18. The next day the LSU moved to the MiG's location, where it ended up fast on a sandbar.

On July 20, a US Navy HO3S-1 operating from *Glory* was able to buoy the site of the crash. With air patrols from *Glory* and *Sicily* providing cover, while the cruiser HMS *Belfast* was stationed north to provide radar warning of any aircraft coming down from Antung and the antiaircraft frigate HMS *Cardigan Bay* took position to provide fire support in the event the communists did attempt to break up the proceedings, a *Glory* Firefly managed to guide the LSU through the sandbars.

By nightfall, the VK-1 engine had been recovered and the major pieces of the airframe were located. The LSU loaded the airframe pieces the next morning and pulled away from the sandbar by midday. That afternoon, a flight of VMF-312 Corsairs spotted 32 MiG-15s inbound to the location, but fog had rolled in that covered the ships below and thus prevented contact. After several minutes, the enemy jets turned back north. On July 22, the LSU and its crucial cargo were embarked in USS *Epping Forest* (LSD-4), and the only MIG-15 recovered by UN forces during the war was brought back to Inchon, where it was taken to Kimpo airfield for further investigation and study.

Life aboard both the American and Commonwealth carriers was similar. Unlike the large fleet carriers operating with Task Force 77, none of these ships had any air conditioning, which made conditions aboard ship during the hot and humid Korean summers hellish, while lack of adequate heating in the freezing Korean winters made life miserable below decks. Flight Sub-Lt Russ Mallace of 802 Squadron described conditions aboard *Ocean*:

> The full complement of aircraft created a major problem in accommodation, as the ship didn't have sufficient berths for the numbers aboard. Sleeping space was at a premium, even for hammocks, so mess deck tables, and also the weather decks, were in frequent use. To compound this the ship was not air conditioned and don't forget, we were operating in the Far East in summer! Compare this with the American carriers we met up with in Sasebo, Japan where everyone on board had a bunk and their own personal space, even if they weren't air-conditioned. The most junior officers such as myself lived in what was called "the Dormitory" just forward of the wardroom, while slightly more senior officers had cabins in "the Casbah" right forward on the starboard side. The lack of air conditioning in our ships was a real problem.

Outside of these events, the operational lives of the small carriers and their squadrons followed a sameness of daily action. The goal was 48 sorties per day, which meant that the 24 Marine Corsairs in the on-board squadron were flown on average twice a day. Strike forces could range from a single four-plane division to a full six-division strike on an important target. Large strikes were generally flown when requested by Fifth Air Force for a major operation, such as the strikes against the North Korean hydroelectric complex in the summer of 1952. Ordinarily, a mission would be flown by two divisions. Missions included coastal patrols searching for enemy shipping, road and rail reconnaissance in search of truck convoys or trains, and close air support for the UN units on the western side of the battle line.

Over time, the enemy brought in more and more antiaircraft guns and positioned them near railroads, road junctions, bridges and other obvious targets. By 1952, mobile batteries of 23mm cannon were in North Korea, where they could be moved about as needed. Frequently the enemy would site mobile batteries where there was no obvious target to surprise unsuspecting pilots whose guard might be down in the belief they weren't near antiaircraft defenses. One pilot stated when this tactic became more frequent that the result was "tension never let up from the moment you went feet-dry to the moment you were back over the water on the way home." As 802 Squadron pilot Peter Carmichael remembered:

> Our biggest worry was flak. It kept you worried the whole time. Some of it was radar-controlled, and some used tracer. Most AA weapons were very well concealed, sometimes in houses in the villages. False targets were used as flak traps and their fire discipline was excellent.

During the second half of 1951, as the peace negotiations got under way at Panmunjom, air operations increased. The engineering department was able to maintain over 90 percent operational readiness for VMF-312's Corsairs, flying an average 767 sorties per month over 1,500 flying hours. Higher levels of operation always meant higher losses. Three F4Us on a 12 plane rail-cutting mission were shot down on October 16. First Lieutenant Ralph H. Thomas, Jr. and 2nd Lt Carl R. Lundquist were killed, while Captain Austin J. Bailey made it to the coast, where he bailed out and was rescued by a helicopter from Cho-do Island. The only loss in November was Major James Crutchfield, who was shot up while attacking a bridge and killed attempting a crash landing aboard the carrier.

With high operations, pilots were not the only ones at risk. While VMF-312 was based at K-18 in November, a Checkerboard ground crewman was killed when a Navy Skyraider attempting an emergency landing went out of control on touchdown and crashed into the flightline.

Between April and June 1952, the Checkerboards operated off *Bataan* when she returned for her second Korean tour. Losses were high, with 13 planes lost during the three-month period, though only eight were due to enemy action. Fortunately, only one of the pilots involved was killed when 1st Lt Guy McLaury lost power when he took off from K-18 to return to the carrier and crashed at the end of the runway.

Bataan left at the end of July 1952, and the Checkerboards operated from *Sicily* until October and then from *Badoeng Strait* before returning to *Bataan* February 9, 1953 for the ship's final Korean deployment. The *Bataan* tour saw the squadron put the 11¾-inch "Tiny Tim" rocket to use in attacking bridges. Just at the end of the first tour off Korea aboard *Bataan*, Major Dave Cleeland made one of the more amazing escapes of any pilot shot down behind enemy lines. Shot up over the Haeju Peninsula, Cleeland was too low to bail out and he crashlanded on a frozen reservoir. Covered by the other three Corsairs of his flight, Cleeland got out of the wrecked plane and made a run for the woods on the edge of the reservoir. He was halfway there when a communist cavalry unit that had seen his crash charged onto the ice waving sabers and accompanied by bugle calls. As they did so, the three Corsairs dived on them. Men and horses slipped and fell on the ice as the blue fighters streaked overhead firing their cannons. The cannon fire broke the ice, and those not killed outright soon found themselves and their mounts swimming for their lives in the frozen water. In the meantime, despite falling several times, Cleeland made it to shore, and minutes later a VMO-6 helicopter that had been operating nearby arrived to make the pickup.

During the war, the British light fleet carriers and American CVE and CVL carriers were crucial for the successful air operations over western Korea. The small carriers could operate within 60 miles of the coast in the shallow Yellow Sea, unlike the *Essex*-class fleet carriers, which could not comfortably operate closer than 100 miles off the west coast. This meant that the aircraft these ships carried could answer calls for assistance faster, while the nearness of the carrier meant a shot-up airplane had a good chance of making it home. The duty was mind-numbing in its sameness of going after the same targets repeatedly. It might seem there would be no economic payoff to sending an airplane as expensive as a Sea Fury or a Corsair to hunt ox carts, but the truth was that over the past 100 miles of the communist supply line to the front, ox carts provided the majority of the transportation for food and ammunition. There was no "glory" in the war fought by the small carriers, but the war would not have ended as successfully as it did without their constant presence in fair weather and foul.

CHAPTER 17

THE MARINE WAR

Following the support given to the 1st Marine Division in the epic withdrawal from the Chosin Reservoir from November to December 1950, the squadrons of the 1st Marine Air Wing divided their time between tours aboard the escort carriers of the Seventh Fleet's Task Force 95 and duty ashore from rugged Korean airfields just behind the front lines, where they provided close air support to UN line units under control of FEAF's Joint Operations Center. These operational conditions would continue through the rest of the war.

One aspect of Marine aviation was very different from naval aviation. This involved the participation of enlisted pilots in front-line squadrons. While enlisted naval aviation pilots had existed in the Navy since 1919, and the famous "Flying Chiefs" of VF-2 had been the most elite fighter squadron in the prewar Navy, most naval aviation pilots flew in secondary squadrons such as patrol and transport squadrons or served as long-term instructors in Training Command.

The Marines on the other hand saw widespread participation of the noncommissioned NAPs. Many prewar flying sergeants had received commissions after the war began; several, such as Ken Walsh, the first Marine Corsair ace of World War II who was commissioned in 1942, eventually rose to high command. The Marine Corps has traditionally been more open to taking qualified enlisted men into the ranks of officers and not limiting their promotion possibilities, as has almost always been the case in the US Navy where a "mustang" (ex-enlisted) officer normally does not advance beyond the rank of lieutenant commander.

Several outstanding enlisted Marine aviators served in the Korean War, flying everything from OY-2 Sentinel observation aircraft and helicopters of all types to Corsairs, Tigercats and Panthers. Many of these men had served as temporary-commission officers during World War II and had reverted to their previous status afterwards. Some senior Marine aviators found themselves uncomfortable with these men (perhaps because they had outranked them during the war and were more experienced pilots). Many NAPs who had served as officers during the war left the service afterwards, then when they discovered they missed military aviation took advantage of a program that allowed them to return to the Marines as a master sergeant (E-7) if they did so within 90 days of original separation from service, or technical sergeants (E-6) if doing so after the 90-day limit.

After the war some NAPs became early jet pilots, but a rule was soon put in place that NAPs could not be enrolled in flight training for jets; this became moot as the Corps faced personnel reductions due to budgetary restraints that saw commissioned officers dropped from the ranks of Marine aviators due to the cost of their pay, while the enlisted men could remain since they were lower paid, and the rule was overturned in 1949. The budgetary crisis of 1948–50 made these experienced NAPs even more valuable, and ensured their presence in combat squadrons when war broke out in 1950.

During the fighting in the Pusan Perimeter and later at the Chosin Reservoir, VMO-6 pilot Technical Sergeant Robert A. Hill flew 76 missions in the Stinson OY-2 Sentinel light observation aircraft and gained the nickname "Bulletproof" for bringing back shot-up airplanes. He was awarded the Distinguished Flying Cross for evacuating wounded Marines under fire in the Chosin fighting at Hagaru-ri, flying them two at a time down to Hamhung for evacuation to Pusan and Japan.

When VMF-311, the first Marine squadron to operate the F9F Panther, brought their jets to Korea in November 1950, the squadron pilot roster included several NAPs, including Master Sergeant Avery P. Snow, the first NAP to fly 100 jet combat missions. A prewar NAP, he had served during the war as a captain in VMTB-232.

VMF-212 had six NAPs among their 28 Corsair pilots when the squadron went to Korea in September 1950. They were Master Sergeants John B. McMasters, Clyde B. Casebeer, Billy R. Green, Donald A. Ives, Norman E. Payne, and Technical Sergeant Gail Lane.

Marine Photographic Squadron 1 (VMJ-1) was formed on the new F2H-2P photo-recon Banshee in early 1952, and brought their planes to Korea that spring. Over the course of the rest of the war, the squadron was responsible for an overall total of one-third of all photo reconnaissance performed in-theater in 5,025 sorties, during which they used 793,012 feet of film. The photo Banshees were unarmed, and therefore needed armed fighter escort for most of their missions. VMJ-1's high-mission pilot was Master Sergeant James R. Todd, whose record of 101 missions included 51 in F2H-2P Banshees, ten in F9F-2Ps, 23 in F7F-3P Tigercats, 13 in F4u-5Ps and four escort missions flown in F4U-4s after he arrived in Korea in 1951 before the arrival of the Banshees in April 1952. He later recalled, "we relied on a thirty-eight pistol, a can of film and a lot of speed."

Master Sergeant Lowell C. Truex discovered that one problem he faced as an enlisted aviator was getting Air Force F-86 Sabre pilots assigned as his escorts to take him seriously when he gave them a pre-mission briefing. "Some of them took a very casual attitude about escorting a Marine reconnaissance pilot." However, they soon discovered that the Banshee's speed meant they had to fly at high power settings to keep up. "The Banshee had more fuel than they did," Truex recalled, "and it was not uncommon for them to reach 'bingo' fuel before the mission was finished. We frequently finished the run and flew home alone." Most of the hot-shot fighter pilots were unaware that Truex had shot down two Japanese N1K2-J "George" fighters during service with VMF-224 at Okinawa as a 2nd lieutenant.

Master Sergeant Calvin R. Duke, who claimed to be the oldest NAP flying combat in Korea, was once caught by two MiG-15s while making a photo run over the Yalu in "MiG Alley." In a fight that saw him outfly the MiGs in his unarmed Banshee, he outmaneuvered them from where they initially caught him at 38,000 feet down to 10,000 feet, where he was able to outrun them due to the Banshee's higher low-altitude speed.

Most of the R4D (C-47) Skytrains operated by VMD-154 that flew into the improvised airstrip at Hagaru-ri, which was technically 500 feet too short for minimum field requirements for the transports, were flown by NAPs. These pilots brought in supplies and took out wounded over the five days between December 6, 1950, when the field – which had been constructed during the fighting at Hagaru-ri – opened for operation, and December 11, when the division began the final withdrawal to Hungnam. One NAP even brought in an R5D (C-54), loaded it with a maximum number of wounded, and took off from an airfield that the manual said was 1,200 feet too short to accommodate the big four-engined transport. VMD-154 had also dropped over half the total supplies airdropped to the 1st Marines during the fighting at Chosin Reservoir, where they established a reputation for coming in low and making accurate drops inside the Marine lines, a record the Air Force C-119s did not match.

Organizationally, the 1st Marine Air Wing reported to Fifth Air Force following the withdrawal of the Marine division from North Korea. The Air Force system of air operations control was bureaucratic and did not serve the ground forces the way the Marines were used to operating with their division. The Joint Operations Center planned air support missions 24 hours in advance, which struck the Marines as particularly useless since the value of close air support was the ability to alter operational plans with changes in the battlefield situation.

The Air Force was not really committed to close air support as the Marines understood the term, being more involved in "battlefield interdiction," which meant air strikes to isolate the battlefield rather than direct strikes against enemy formations in combat with UN ground forces, and "strategic air control," which related to the work of the 4th and later also the 51st fighter interceptor wings in fighting the enemy in "MiG Alley" to prevent the MiG-15s intervening against UN air support aircraft further south on the peninsula, and B-29 bombing operations. The fact there were no strategic targets in North Korea that could be knocked out and change the conditions of the war did not seem to faze the bomber generals. The bureaucratic fight between the Marines and Air Force for local control was not as successful as that of the Navy in fighting the same system, to the detriment of the men on the front lines, who were reduced to waiting hours at best and a day normally for air support, and frequently getting none at all when their request was deemed not high enough priority by the Air Force planners in Seoul.

By mid 1951, the wing was distributed at three bases in Korea. MAG-12 was based at K-6 (Pyongtaek), while MAG-33 was based at K-3 (Pohang) and K-8 (Kunsan). By late 1952, MAG-33 operated its jet units, Panther squadrons VMF-311 and newly arrived VMF-115 as well as Banshee-equipped VMJ-1, at K-3. VMF-513, "The Flying

Nightmares," operated from K-8 on the southwestern side of the peninsula, with their F4U-5N Corsairs and the remaining F7F-3N Tigercats left behind when VMF-542 was returned to the United States in 1951 in preparation to equip with the Douglas F3D-2N Skynight jet night fighter.

MAG-12 operated its Corsair squadrons, now renamed "marine attack squadrons" from "marine fighter squadrons." VMA-212, 214 and 323 flew the remaining Corsairs, with 212 and 323 equipped with the final version of the Corsair to see American service, the AU-1. This Corsair had been developed from the F4U-5 airframe, with a low-altitude-rated R-2800, and several hundred pounds of armor plate welded to the airframe to cover the engine, gas tank, oil coolers and cockpit, with a heavier ordnance load than either the F4U-4 or F4U-5. Performance suffered, but the airplane was no longer tasked with air combat, being completely dedicated to ground attack as defined by its new designation. In addition, VMA-121 was equipped with Douglas Skyraiders, including the AD-4N night attack version for night-heckling operations. MAG-12 also controlled VMA-312 administratively, though the squadron was permanently assigned to *Bataan*, *Sicily*, or any of the other CVEs that operated with Task Force 95.

In January 1951, the Marine Corps was authorized to increase its active-duty squadrons from 18 to 21. Eight days after this authorization, nine Marine Reserve fighter squadrons were activated for regular service. Six were mobilized for personnel only, to be distributed as needed into the regular squadrons. Three – MF-131, 251, and 451 – were activated as squadrons, preserving their squadron designations. The recall of the reserve squadrons was due to the small number of Marines that had been trained as aviators between 1945 and 1950.

The most famous Marine reservist to serve during the Korean War was baseball legend Ted Williams. Chosen as professional baseball's Most Valuable Player in 1946 and 1949, the year he became the last man in the sport to have a .400 hitting record for the season, Williams had served in World War II as a Marine aviator, though he did not receive a combat assignment before the war ended. He had remained a member of the unorganized reserve and by 1952 he was a 33-year-old captain.

Like many others in the unorganized reserve, Williams believed there was a "gentleman's agreement" in the Department of Defense following the enormous downsizing after World War II that they would not be recalled to active duty until all of the organized reserves had been activated and there was a serious national crisis at hand. However, in 1949, President Truman had signed a change in the law that allowed for the unorganized reserve to be called immediately in order to bring regular units to full strength. The bitterness expressed by James Michener's character "Lieutenant Harry Brubaker" over being called to active duty while "the guys in the organized reserves are still sitting at home," was widespread, and grew more so as it became increasingly apparent after the summer of 1951 that the United States only wanted to stop the war on the *status quo ante* and that fighting in Korea during the war's final two years was more about scoring points in the armistice negotiations than about winning the war in the traditional sense of that word. "Who wants to die for a negotiating point?" was a valid argument.

When Williams was recalled to active duty in the middle of the 1952 baseball season, he tried every legal avenue to obtain a deferment, claiming economic difficulty as the "sole support" of his mother and brother, as well as his wife and daughter. He also attempted to utilize the political connections he had. When his team, the Boston Red Sox agreed to pay him his full $85,000 1952 salary, the economic argument collapsed, and the politicians he knew were reluctant to be seen helping someone avoid being called up when many of their constituents were going to war willingly or otherwise. Reluctantly, he left for active duty after the sixth game of the season. In an interview published in the August 1953 issue of *The American Weekly*, he said: "The recall wasn't exactly joyous news, but I tried to be philosophical about it. It was happening to a lot of fellows, I thought. I was no better than the rest." Though he was initially bitter about the call-up, he later remembered, "The guys I met in the Marine Corps were the greatest damned guys I ever met."

Williams was sent to NAS Willow Grove in Pennsylvania for refresher flight training, then on to MCAS Cherry Point in North Carolina, where he transitioned to the F9F Panther. By his later account, he found that flying jets was "easier than props because they had no torque, less noise, tricycle landing gear and wonderful flight characteristics." By the end of 1952, his training was complete and he was put into a draft of replacement pilots, both reservists and regulars, whose destination was Korea. By the luck of the draw, one of the regulars in the group was newly promoted Major John H. Glenn, Jr., son of a World War I pilot and a veteran of the Central Pacific campaign in World War II, where he had met and flown as wingman for Charles A. Lindbergh at one point.

Arriving in Korea in February 1953, Captain Williams and Major Glenn were assigned to VMF-311, based at K-3 Pohang, which had just received new F9F-5 Panthers. The squadron called themselves the "Willing Lovers" as a play on the "WL" identification letters carried on the Panthers' vertical fins. A policy was in effect within the squadron that a reserve pilot would be assigned to fly as wingman with a regular while he learned the ropes. Williams thus became Major Glenn's wingman. Following his death in 2002, former senator and astronaut John Glenn recalled, "Ted flew as my wingman on about half the missions he flew in Korea."

Over the years, as he became a legend in baseball, Williams had been given many nicknames, among them "The Kid," "The Splendid Splinter" and "Teddy Baseball." In VMF-311 he was given the nickname "Bush" (as in "bush league"), initially as a way to "get his goat," as Glenn later recalled. Williams accepted his new moniker; later, when his fellow pilots had seen he was as good in a Panther cockpit as he was on a baseball diamond, he refused to let them change it.

Williams' most memorable mission was his first, flown on February 16, 1953, which was a bombing mission into North Korea behind the front lines. As the 35 Panthers from VMF-115 and VMF-311 dove on the target, Williams felt his plane shudder as he reached 5,000 feet. "Until that day I had never put a scratch on a plane in almost four years of military flying. But I really did it up good. I got hit just as I dropped my bombs on the target, a communist tank and infantry training school near Pyongyang. The hit knocked out my hydraulic and electrical systems and started a slow burn." His radio was knocked out and the Panther had a fuel leak that caught fire from an electrical short in the airplane.

The squadron's pairing policy paid off, as Glenn flew alongside and pointed up. When they climbed into thinner air, the fire was extinguished. Glenn escorted Williams back to Pohang. Even though he had no idea how badly damaged his airplane was, Williams refused Glenn's gestures that he eject due to his fear his back would be broken or his knees shattered because of his 6ft 4in. height.

As they dived to a lower altitude, the fire started again. When he cycled the gear, it wouldn't extend. Men on the field watched with apprehension as the burning Panther with the 30-foot trail of flame got lower and lower, many expecting an explosion on touchdown without gear. The controls had been hit and Williams found the response was sluggish. The Panther touched down and skidded down the tarmac with sparks flying for 1,500 feet before it came to a stop. At that point, the fire reached the nose, and there were only moments before the ammunition would explode. Williams blew off the canopy and jumped out of the cockpit, hitting the ground in a less-than-perfect baseball slide. Picking himself up, he was able to run away from the coming explosion despite a sprained ankle. Shortly after, he described the event in a letter to then-girlfriend Evelyn Turner: "I had holes all over the plane and was riding on all the prayers people say for me 'cause I was awfully lucky. My plane was burning like hell when I crash landed. Everyone around here is now calling me lucky."

The next day, Williams flew the second of an eventual total of 39 combat missions, during which his planes were hit by flak on three different occasions. His tour was cut short when he developed a severe ear infection and a recurring virus at the end of May and was sent home in June to be discharged from active duty on July 28, the day after the Korean Armistice went into effect.

When asked about his experience after the war, Williams said:

> Everybody tries to make a hero out of me over the Korean thing. I was no hero. There were maybe 75 pilots in our two squadrons and 99 percent of them did a better job than I did. But I liked flying. It was the second-best thing that ever happened to me. If I hadn't had baseball to come back to, I might have gone on as a Marine pilot.

While Ted Williams may have been the most famous Marine reservist to serve in Korea, he wasn't the only Major Leaguer in the Marine Air Reserves. Former World War II SBD dive-bomber pilot and New York Yankees second baseman Captain Gerald J. "Jerry" Coleman saw more combat than Williams did. Legendary Yankees manager Casey Stengel called Coleman, who first made it to the majors on the 1948 Yankees team, "The best man I ever saw on a double play. Once, I saw him make a throw while standin' on his head. He just goes 'whisht!' and he's got the feller at first." Named Rookie of the Year for 1949 by the Associated Press, the next year Coleman was named to the All-Star Team. Playing brilliant defense in the 1950 World Series, he received the Baseball Writers Association of America Babe Ruth Award and was named the series' Most Valuable Player. Called up in 1952 at the same time as Williams, the two took their physical together at NAS Willow Grove, then never saw each other again.

Coleman had entered flight training as an 18-year-old in 1942, and flew combat in the Philippines with the "Torrid Turtles" of VMSB-341 in 57 missions, during which he was awarded the Distinguished Flying Cross; the squadron flew as "flying artillery" covering the flank of the 1st Cavalry Division during the advance on Manila in 1945, incidentally the last US combat tour of the venerable SBD Dauntless. When he was called up from the inactive reserve, he hadn't flown a plane since 1945. Unlike Williams, Coleman accepted recall with understanding: "If my country needed me, I was ready. Besides, the highlight of my life had always been – even including baseball – flying for the Marines."

After refresher training, Coleman was sent as a replacement to VMA-323 "Death Rattlers," where he flew the F4U-4 and AU-1 Corsair in 63 missions between January and May 1953 and was awarded a second DFC. During his tour, he once narrowly missed death when he was cleared to take off from one end of the strip at the same time an F-86 was cleared to land from the other end. The Sabre pilot was able to pull up at the last moment. In another close call, his engine failed on takeoff with a full bomb load. Luckily, the bombs didn't explode when he touched down with his wheels up, but the airplane flipped over and pinned him in the cockpit; his helmet strap was jerked so tight he nearly strangled before being rescued by a quick-thinking Navy corpsman. Following his 63rd mission, he took an assignment as a forward air controller on the front lines, where he served in some of the bloodiest fighting during the last two months of the war.

Returning in time to rejoin the Yankees for the 1954 season, he suffered an injury in the 1955 season that led to forced retirement after the 1957 season. He left the sport on a high note, hitting .364 during the Yankees' loss to the Milwaukee Braves in his sixth World Series. Coleman achieved later success as a sports announcer, best known for his call of ex-teammate Mickey Mantle's 500th career home run on WPIX in 1967: "Here's the payoff pitch ... This is it! There it goes! It's outta here!" Between 1972 and his death in 2014, he was the play-by-play

"Voice of the San Diego Padres," where he was known for his signature catchphrase: "You can hang a star on that one, baby!"

Throughout the Korean War, 48 percent of the total sorties flown by the 1st Marine Air Wing saw a Marine Air Reservist in the cockpit.

While all armed forces had seen the potential of the helicopter for rescue and observation when it was first introduced in 1944, the Marines were the first to see a more fully developed combat operational use due to their traditional duty as the shore landing force. As early as 1948, using the Piasecki HRP-1 twin-rotor helicopter in HMX-1, the experimental helicopter transport squadron created in 1948, the Marines had demonstrated "vertical envelopment," each helicopter carrying a squad of Marines for an "invasion" of San Clemente Island off the coast of Southern California near the Marines' main base at Camp Pendleton.

The HO3S-1 helicopters operated by VMO-6 had clearly shown the value of the helicopter for rescuing pilots downed behind enemy lines, and for casualty evacuation during the Chosin campaign. On August 31, 1951, Lt Col George W. Herring brought Marine Helicopter Transport Squadron 161 (HMR-161) to Korea. The squadron had been commissioned the previous January as the first helicopter transport squadron, and was equipped with the Sikorsky HRS-1 (S-55), the first helicopter with serious load-carrying capability. Colonel Herring had the most experience of any Marine with helicopters, having commanded HMX-1.

Two weeks after their arrival in Korea, HMR-161 took part in Operation *Windmill*, the first major resupply and casualty lift performed by helicopters. Over the space of two and a half hours, the big Sikorskys delivered 19,000lb of supplies to the engaged 2nd Battalion of the 1st Regiment, while evacuating 74 casualties. Lt Col F. B. Nihart, commanding officer of the 2nd Battalion, 1st Marines, later recalled the historic operation.

> We were attacking from Hill 673 towards Hill 749 along a ridge system. Our supply and evacuation route was four miles of mountainous foot trails. The only way to keep supplies moving over these trails was by Korean Service Corps porters. The 400 Koreans could not keep up with the logistical demands imposed by heavy

> casualties and high ammunition expenditure. HMR-161 was called in to fill the supply and evacuation gap and performed admirably.

On Thanksgiving, the big blue helicopters flew over 4,000lb of holiday dinners to the front-line troops, and during Christmas they flew Bob Hope's USO show from forward base to base.

During two years of combat, the pilots and crews of HMR-161 developed and refined nearly all the operational techniques utilized by Marine helicopters in combat support operations nearly 70 years later.

Marine aviation entered the jet age early on when Marine ace and famed test pilot Lt Col Marion E. Carl commissioned VMF-122 at MCAS Cherry Point, North Carolina, in March 1947. The squadron was the second after VF-17 to fly the McDonnell FH-1 Phantom. VMF-311, which had been returned from occupation duty in Japan at the end of 1946 and utilized as a maintenance squadron at MCAS El Toro, California through 1947, was reactivated as an active flying squadron on April 15, 1948, commanded by Lt Col John P. Condon. The squadron became the second Marine fighter squadron equipped with jets when two former Air Force F-80B Shooting Stars, known to the Marines by their naval designation TO-1, arrived in the squadron that June. Over the summer, ten more jets, known to the pilots as "slick chicks," arrived. While the F-80 was an operational Air Force fighter, the Navy used the Shooting Star as a jet trainer. Major General Condon recalled the early days of jet flying with the squadron:

> We relied very heavily on the most welcome support of the F-80 outfit at March Air Force Base, which was just over the hill from El Toro.
>
> We had some Corsairs left in the squadron and we kept one of them circling up above the saddleback. If we needed parts that we didn't have, we had an arrangement where we'd call the Corsair and he'd call March, give the part number and say, "I'm coming in." By the time he landed – he wouldn't even cut the engine – they'd have the part there to him and he'd have it back over to us in about 10 minutes. In that way we were able to keep the few F-80s we had in commission almost all the time. We also worked all night to do our routine checks or repairs so we could fly every day.

VMF-311 not only trained its own pilots but provided jet transition training for Marine aviators in west-coast units, a duty also performed for east-coast squadrons by VMF-122, which was now also flying the TO-1. Over the next two years, over 300 pilots received jet transition training with only one accident, which happened when a pilot landed short of the runway after a flame-out. During this time, the squadron acquired a nickname based on the identification letters "WL." In the phonetic alphabet, this was "William-Love," which soon became "Willy-Love" and finally "Willing Lovers."

On March 22, 1950 the first Grumman F9F-2B Panther arrived. Squadron commander Lt Col Paul Fontana, an ace from the "Cactus Air Force" days on Guadalcanal, initiated an intensive training program to turn his men into accomplished jet fighter-bomber pilots. Three months later the Korean War began. The squadron was alerted to move overseas several times in the next four months, only to have the orders canceled. On November 7, however, new squadron commander Lt Col Neil R. McIntyre was notified the "Willing Lovers" were headed for Korea. The squadron and its Panthers went aboard USS *Bairoko* (CVE-115) on November 14 and arrived in Yokosuka on November 30. The cocooning process to protect the aircraft from saltwater corrosion proved inadequate for most of the Panthers, and several days were spent cleaning and smoothing the leading edges of the wings and horizontal stabilizers.

The squadron had arrived at the height of the crisis caused by the intervention of the Chinese forces in North Korea. Arriving at Yonpo the morning of December 10, Colonel McIntyre and Major William E. Crowe flew the unit's first strike at 1640 hours that same day, a road reconnaissance into the Chosin Reservoir. Colonel McIntyre recalled that first Marine jet fighter combat mission after the war:

> We finally found a target and started to work. As I recall, on one run I had reached my pullout and was watching Earl's run when I noticed something strange. His tracers weren't quite right. I called, "Earl, did you fire on that last run?" Pretty soon Earl comes back, "no." The light dawns – the tracers were going the wrong way! "Earl, I guess someone's shooting at us then." That's the way it goes.

The squadron flew several other road recce missions before they evacuated Yonpo on December 13 and relocated to K-9 airfield, seven miles north of Pusan.

The field had been a dirt strip, laid out in an old riverbed with Marston matting. When the jets arrived, the Air Force crews worked to compact the dirt with asphalt sprays, which were not effective. Colonel McIntyre recalled:

> We had to make our takeoffs in two plane sections. The dust cloud raised by our tail pipes was so thick that after one takeoff we had to wait several minutes before the next takeoff could be attempted. Even the Air Force P-51s were having their problems from this dust cloud situation. So we became experts in section takeoffs and four plane division join-ups en route. We continued to operate under these conditions until the dust took its toll.

On December 21, 1st Lt Weldon Richardson spotted an enemy supply caravan, which he at first thought was composed of Mongolian ponies. When he rolled in on a strafing run, he identified the animals as two-humped camels! Air Force pilots on the field laughed when he reported he'd attacked an enemy camel caravan, but over the next week at least three other camel caravans were spotted and attacked in North Korea. The day after Christmas, Captain Jerry A. Miller became the first Willing Lover to die in combat when his Panther exploded after he made a low-altitude attack on a highway bridge and struck the top of a ridge on pullout. At the end of December, the squadron provided close air support to the Army's 25th Infantry Division when the unit came out of North Korea, and attacked Pyongyang, where they rocketed the UN storage depots that had not been burned down during the retreat to deny supplies to the pursuing Chinese. The Willing Lovers had accumulated 424 flying hours in the few days they were in combat, a sign of things to come.

As the squadron continued to provide close air support during the fighting in January, the cold, mud and rain made operating from K-9 more difficult. Colonel McIntyre recalled:

> Hot tailpipe runups not only melted and blew away snow but also melted the frozen ground and created monstrous ruts in the ground

> making taxiing and parking extremely difficult. That beautiful snow-covered cow pasture became a nightmare and a big mud hole.

Mechanical difficulties created by operating from the primitive airfield eventually led to the Panthers being grounded on January 16. Because the Panthers required extensive maintenance to return them to normal operating condition, VMF-311 departed for Itami AFB in Japan on January 25. They returned to Korea on January 17, where they operated from K-3, a more developed airfield outside Pohang on the east coast of the peninsula, from whence they would operate for the rest of the war. Colonel Fontana, now commander of MAG-33 to which VMF-311 was attached, remembered their return:

> Now under the command of Lt Colonel Kinney, the squadron compiled an impressive combat sortie rate as he applied his ingenious mechanical ability, which had maintained the F4F Wildcats' flying on Wake Island almost ten years previously, to make this squadron an effective operational unit. The squadron's performance from then on was outstanding.

On May 1, 1951, the Willing Lovers were part of a maximum-effort 75-plane strike mission flown by the Marines as part of an Air Force strike on North Korean airfields around Sinuiju on the Yalu. Despite the fact the UN planes were attacking a target within sight of the main MiG base at Antung, the enemy jets made no attempt to intervene. During the rest of the war, the squadron made a reputation for arriving on the scene quickly when tasked with close air support on the front lines. Because of their relative silence while approaching a target, the jets were frequently able to hit the enemy before they knew they were under attack.

On July 21, 1951, MiGs managed to evade the F-86 barrier patrols in "Mig Alley" and flew into North Korea north of the battle line. A flight of VMF-311 Panthers was attacked, and 1st Lt Robert W. Bell was shot down. He was captured by enemy troops and remained a POW until he was released in September 1953. During the encounter, the Soviet pilots demonstrated a high degree of airmanship, using their superior speed and maneuverability to pick their moment for attack. The surviving Marines returned convinced that the Panther didn't belong in the same sky with the MiG-15. The event demonstrated how the war might have been different but for the presence of the F-86s that could block the presence of MiGs over the battlefield. On September 25, the Willing Lovers had another brush with MiGs over Pyongyang. Spotting the incoming enemy jets, the Panther pilots jettisoned their bombs and turned into the enemy, who were not as aggressive as those they had met in July. During October and November, when VMF-311 was engaged in interdiction strikes in North Korea well north of the battle line, MiGs were spotted on several occasions but no interceptions were made.

Through the winter of 1951–52, the MiGs were not spotted. That changed on April 30 when eight Panthers were jumped by an equal number of enemy jets at 25,000 feet over Pyongyang as they entered their attack dives. The last Panther was flown by Captain John E. McVey, who turned on the enemy after dropping his bombs and managed to "ventilate" one MiG before it pulled off to the north trailing smoke. McVey returned to Pohang with several large-caliber holes in his tail surfaces.

In February 1952, VMF-311 was joined at Pohang by VMF-115's Panthers. The squadron was the first Marine jet fighter squadron to equip with the Panther, and one of the first in the Navy or Marines to fly the new Grumman jet, having received their first F9F-2 in July 1949 and their full complement that September. VMF-115 had been assigned to the east coast, where they became the first Marine jet squadron to be carrier-qualified aboard USS *Franklin D. Roosevelt* (CV-42) in November 1950. After training through most of 1951 for the carrier-based close air support role, the needs of the war had brought them to the west coast in January 1952 with their new F9F-4 Panthers; these jets were powered by Allison J-33s, as had been the 50 F9F-3s operated by Air Group 5 in 1950, as a backup to the new F9F-5 powered by the Pratt & Whitney J-48. They departed San Diego aboard *Bataan* on January 27 when the carrier headed west for her second Korean deployment. They arrived at Yokosuka on February 11.

The squadron arrived at Pohang on February 26 and flew their first combat mission three days later. By the end of March, the two Marine Panther squadrons were sharing combat missions equally. On March 12 squadron commander Lt Col Thomas M. Coles was on a solo mission over North Korea when he took a large-caliber hit in his nose.

> The shell I took in the nose of my aircraft, from the curvature of the souvenir pieces of that shell that I still have, was more like an 80 to 90mm size and did more damage than a 37mm shell could have done. It blew off the nose section of the plane back to the firewall. The four guns were shaped like pretzels. One moment I was traveling in excess of 500mph and the next I was going 180mph as if I had hit a brick wall. It seemed like it took me about three hours to make a 180 degree turn for home and out-run the mass of tracers and big, black, and horrible fiery red exploding fireworks. Not too much later, I landed on a mud front line supply strip about three miles inside our own lines. As I turned off the runway I ran out of fuel.

With the identifying letters "AE" on the tails of their Panthers, VMF-115 soon became known as the "Able Eagles." In April, the squadron experienced several engine failures in the F9F-4s. The Panthers were grounded on April 23 to have the Allison engines examined. When no immediate cause was found, the Able Eagles began exchanging their F9F-4s for F9F-2s held at the Fleet Replacement Unit at NAS Atsugi, Japan. These Panthers were war-weary aircraft left behind by Navy squadrons on their departure for the United States at the conclusion of a deployment. The first 16 Panthers received were in extremely poor condition. Maintenance personnel found tools in the engine plenum chamber, missing air lines, and ejection seats incorrectly installed that would have prevented successful use. The next month they received another 16 Panthers from the departing VF-52 and VF-111 that were in "like new" condition.

On June 14, a deadly accident occurred the first time the Panthers were armed with VT-fused bombs. Suddenly, Captain Howard D. Campbell's plane blew up, with the blast damaging his wingman so badly he was forced to eject. The VMF-115 Panthers all salvoed their bombs, while the VMF-311 Panthers experienced no difficulty with their VT-fused bombs and continued the mission. On return to Pohang, it was determined that the VMF-115 ordnancemen had installed the new fuses incorrectly, using one wire and no retainer plate to keep the fuse from arming itself in flight before the bomb was dropped.

Beginning in 1951, the 1st Marine Air Wing created a system with the Air Force that allowed Marine jet pilots who had completed their tours with VMF-311 and 115 to serve on temporary duty (TDY) in the 4th and 51st fighter interceptor wings, the two F-86 units charged with keeping the enemy jets from penetrating into Korea from their Manchurian bases. This allowed the Marine aviators to gain experience of jet air combat, while providing a pool of combat-experienced jet pilots for the Air Force squadrons, where the standard Air Force replacement system sent inexperienced pilots to the units. Generally, there was only one Marine at a time serving with each wing. Being experienced jet pilots, they quickly checked out in the Sabre and were soon flying missions with the unit they were TDY with. Most flew 20 missions or less, but at least one flew 50 missions. Between November 1951 and July 1953, 13 of these Marines were credited with shooting down a total of 21 MiG-15s flying with the Air Force.

Most successful of the Marine Sabre pilots was Major John F. Bolt, a World War II ace who shot down six Zekes in the Solomons in 1943–44 as a member of "Pappy" Boyington's VMF-214, the original "Black Sheep." Before he went to Korea in 1952, Bolt was on an exchange program with the Air Force, flying F-86 Sabres with the 318th Fighter Interceptor Squadron at McChord Air Force Base in Washington between September and December 1951. When he completed his 94-mission combat tour in Panthers with VMF-115 in March 1953, he contacted his friend Lt Col George I. Ruddell, now commander of the 51st FIW's 39th Fighter Squadron, who agreed to take him into the squadron on temporary duty.

Bolt flew a few introductory missions as wingman to 1st Lt Joseph J. McConnell, who at the time was on his way to becoming the Air Force Ace of Aces in the Korean War. The two men became friends and Bolt later credited his Korean success to what he learned during the six weeks he flew with McConnell. With his previous experience in the F-86, combined with his air combat experience, Bolt was quickly assigned as flight leader of McConnell's D Flight when the ace was sent home in May 1953. Once in command, over 16 combat missions and 27 combat hours, D Flight never engaged any MiG fighters.

That changed on May 16, when Bolt and D Flight found themselves in a fight at 45,000 feet with several MiGs. Determined to get a kill, he closed on one MiG despite the fact he was being pursued by several others. The enemy jet scissored violently, but the pilot couldn't shake Bolt as he opened fire, guessing later that he "put 500 rounds into that guy." When examined later, his gun camera film showed lots of incendiary hits, which qualified as a confirmed kill. A week later, on May 22, Bolt shot down the MiG that had attacked his wingman, RAF exchange pilot Flight Lieutenant Roy French. Thirty-two days later, on his 31st Sabre mission, he spotted a single MiG and shot it down after a quick battle just south of the Yalu River.

The battles over the Yalu changed by late June 1953. With the end of the war in sight, the MiGs were not rising to fight the patrolling Sabres as they had in June. While Lt Col Ruddell had scored five victories by the end of May, he had found no further opportunity since. After late night drinks at the officer's club, Ruddell confided his determination to Bolt to get a sixth MiG, even if it meant violating the rules and flying north of the Yalu to accomplish it.

Chasing the MiGs across the river was strictly forbidden, though it happened frequently. When a pilot returned with gun camera footage that showed a kill north of the Yalu, his claim was disallowed. Captain Clifford Jolly had been stripped of his score and sent home in disgrace in lieu of a court-martial earlier in the year when it was found he had scored three of his five victories "illegally." Despite the danger he was putting his career in if he did such a thing, Ruddell asked Bolt if he would fly with him and "go north." Bolt, a very aggressive fighter pilot in his own right, agreed.

On June 30, Ruddell led a four-plane flight into "MiG Alley" with Bolt flying as his element lead. With Air Force air controllers watching the combat on radar at Cho-do Island, successfully concealing the "trespass" was difficult. Just south of the river, Ruddell called "Twin," to which Bolt replied "Cities." This was the signal to switch to the training frequency from the combat frequency. They turned off their IFF (Identify Friend or Foe) units while their wingmen maintained the patrol, broadcasting their position on IFF and giving the controllers a radar image of the full flight.

Flying at 44,000 feet over Manchuria, Ruddell spotted a MiG below. As the two Sabres dived on it, dropping fast, Bolt kept his windshield defroster on maximum to avoid fogging. Ruddell pulled out behind the enemy jet, but didn't shoot, since his windshield had fogged, preventing a clear shot. Seeing Ruddell wasn't going to take the shot, Bolt moved past and opened fire, exploding the MiG for his fourth victory. On return to Suwon, Ruddell was ribbed by the other pilots for having "his" MiG stolen by a Marine.

On July 11, with the end of the war in sight, Bolt led four Sabres on a reconnaissance mission above Sinuiju. Two Sabres departed with bingo fuel, leaving him and his wingman, 1st Lt Jerry Carlile, to continue the mission. Minutes later, they spotted four MiGs taking off from Antung airfield. Despite a low fuel state, Bolt turned his defroster on high, and dived head-on toward the formation. He shot down the leader with four bursts of fire, then banked around and hit the wingman. With these two victories, Major John F. Bolt became the 37th of 40 Korean War jet aces, one of only seven pilots to become aces in two wars and the only Marine to achieve that status. He was awarded the Navy Cross as the only Marine ace of the Korean War, and the last Marine aviator to ever achieve ace status.

Bolt was joined in the last month of the war by Major John Glenn, who became the number two top-scoring Marine Sabre pilot when he shot down three MiG-15s flying an F-86F with the title "Mig-Mad Marine" on its flank. Had the war continued another month, Glenn likely would have joined Bolt as a Marine jet ace.

During the Korean War, 258 Marine aviators were killed, including 65 missing or presumed dead, and 174 wounded. A total of 436 aircraft were lost in combat or operational accidents. Of 221 Marines who became POWs, 31 were Marine aviators.

CHAPTER 18

THE END IN SIGHT

The new year of 1953 saw an increase in operational tempo for the carriers of TF 77 and their squadrons. On January 16, an F9F-5 Panther from *Valley Forge*'s VF-51 on armed reconnaissance stumbled across major enemy rail activity north of Wonsan. After making several strafing runs, the pilot radioed news of his discovery to the carrier, which launched the ship's Skyraiders and one squadron of Corsairs to hit the enemy. When they arrived over the target, 150 railway cars were identified. When the Air Group 5 bombers departed 20 minutes later, they had destroyed 20 and damaged 40 of the cars. It was one of the few major blows against the enemy transportation system achieved by the Navy fliers at this point in the war.

The increase in enemy antiaircraft weapons and early-warning and gun-control radars noted in late 1952 was reflected in the loss rates during 1953. While overall TF 77 carriers had lost 14 Panthers between July and December 1952, that number was equaled in the first three months of 1953, with eight destroyed in April. During the final weeks of the war in June and July, 16 Panthers were lost to enemy defenses. The figures for the propeller airplanes were similar, but by 1953 there were fewer Corsairs aboard the carriers, their squadrons having converted to Panthers.

The recently introduced F9F-5 Panther experienced problems with engine controls. Lt George Schnitzer of *Princeton*'s VF-153 remembered a spate of problems encountered with engine over-speeding.

> It happened when the airplane was over 25,000 feet. With the cold temperature at that altitude, the turbo jet controller (TJC) would

> freeze due to temperature sensitivity. When this happened, the engine would start to accelerate because it was getting too much fuel. If you didn't stop it, the engine could go over the 100 percent power level, with the danger of explosion. The only thing a pilot could do in this situation was to pull the throttle back to idle and switch the TJC control to manual. The problem with this was doing so could lead to another problem – flameout!

Once, when he was at 35,000 feet on CAP, flying at 86 percent power, Schnitzer's TJC froze and soon the engine was indicating 105 percent power. He immediately pulled back power and switched the TJC to manual. "Approaching the carrier, I made very smooth throttle adjustments to make sure there wouldn't be a flameout at that low altitude."

Two weeks after the change in political administrations from Truman to Eisenhower in Washington, change began in regards to operations in Korea. Continuing reconnaissance missions over the hydroelectric system that had been attacked the previous summer brought back photographs in late January 1953 of continuing tailrace activity, which indicated that two generators at the Suiho complex had been repaired and were now again in operation. On February 15, 24 F-84s of the 49th FBG, carrying two 1,000lb bombs each, made a low-level strike on the generators without suffering loss. The Thunderjets were escorted by 82 F-86s from the 4th and 51st wings, which were attacked by 30 MiG-15s from the Soviet 913th IAP of the 32nd IAD. In the ensuing fight, the American pilots claimed four MiGs shot down for no losses, while the communists claimed two F-86s shot down, while admitting the loss of one MiG.

This event began a period of enhanced aerial activity over "MiG Alley" throughout the spring of 1953 that would excite American newspaper readers, as an "ace race" to see who would be the top-scoring Air Force fighter pilot was promulgated by the Air Force. For nearly all Americans, this would be the only part of the Korean air war that would be remembered, particularly since there had been little reporting of the B-29 missions that now "bounced rubble" in North Korea following the destruction of the hydroelectric complexes and what was left of the "industrial" targets in the country. Michener's reporting had been the last public notice of Navy air activity.

Politically, in an attempt to restart the stalled peace negotiations, General Clark proposed an exchange of sick and wounded prisoners of war in mid-February. There was a delay in the communist answer, which Americans did not understand, but was likely related to the decline of Soviet dictator Josef Stalin, who eventually died on March 5, 1953. The death was ascribed to long-term arteriosclerosis that had caused a visible decline in the dictator over the previous year and resulted in a massive stroke on the night of March 1–2, but there have always been rumors of murder. Foreign Minister Molotov's memoirs, finally published in 1993, contain the claim that KGB chief Lavrenti Beria had boasted to the foreign minister that "I took him out." The official medical report cited stomach hemorrhage, which is not the result of arteriosclerosis, but along with stroke is consistent with an overdose of warfarin, an anticoagulant that is colorless and tasteless.

Whatever the specific cause of Stalin's death, on March 6, Georgi Malenkov was confirmed as First Party Secretary, the position the dictator had held. Foreign Minister V. M. Molotov – whose wife Stalin had imprisoned in the gulag, where she was known as "Object No. 12" – remained in charge of foreign relations, while Lavrenti Beria continued as Chairman of the Committee on State Security (by then known as the KGB), while Nikita Khrushchev emerged as a major figure in the new government. These men now sought to improve relations with the United States. While the Soviet Union was feared in the West as a military colossus, these men knew they led a country that was in reality dangerously weak, with no ability to wage a nuclear war other than to send 400 Tu-4 reverse-engineered copies of the World War II-vintage American B-29 on a one-way mission over the North Pole. They were also aware that by 1952 the US Strategic Air Command had the capability to devastate the USSR in a nuclear attack, which was growing as the new B-47 Stratojet bomber entered production.

Following Stalin's death, the North Korean and Chinese negotiators returned to Panmunjom on March 28. Their response to the Clark proposal on the repatriation of prisoners indicated they were prepared to proceed further with the peace negotiations. The prisoner exchange was quickly arranged and was completed by April 26, when plenary sessions resumed, ending a 199-day recess. A period of progress now began which, compared with the preceding 21 months of on-again/off-again negotiations, was later described by Admiral Burke as "extremely rapid."

Enemy troop movements in March, which presaged a return to open combat in the months immediately prior to the final armistice agreement, resulted in both the west coast Task Group 95.11 carrier and the Task Force 77 carriers in the Sea of Japan being diverted to close air support on the MLR. These missions received the code name "Call Shot." The battles along the MLR in the spring and early summer of 1953, in which masses of North Korean and Chinese troops attempted to seize territory to create "facts on the ground," resulted in carnage that was reminiscent of the Western Front during 1916 and 1917. While the presence of communist 23mm and 37mm antiaircraft guns along the front increased the danger for pilots, the fact that more of the attacking aircraft were jets than had previously been the case resulted in lower casualties. Losses for January–March were 34 as compared with the same three months a year before; during the period April–June, losses dropped to 32 compared with 58 for the similar period in 1952.

On March 5, *Oriskany* became the first carrier in Korea to operate the new North American AJ-1 "Savage" nuclear-capable heavy attack bomber. That evening, the afternoon strike aircraft diverted to *Philippine Sea* to make space on *Oriskany* for the Savages, which were similar in size to the B-25 Mitchell medium bombers that had flown from USS *Hornet* (CV-8) in 1942 with the Doolittle Raid. Two AJ-1s were landed and remained aboard overnight; they were launched from the carrier the next morning without incident. The fact that these aircraft were in Japan along with other nuclear-capable bombers at this time contributed to rumors that a possible nuclear strike was contemplated against a communist target in light of the increased combat activity on the MLR.

A few hours after the AJ-1s were launched, the crew of *Oriskany* were again reminded that carrier operations could turn deadly in an instant when VF-124's Lt E. L. Kumer landed his F4U-4, which had a hung 250lb bomb. With a sea state that had the flight deck "dancing," Kumer landed hard and the impact dislodged the bomb; it bounced across the flight deck and finally exploded over the No. 3 elevator, causing major damage. Two flight deck crewmen were killed, while 12 others, including two from the ship's Marine detachment and Lt Kumer, suffered injuries; both Kumer and the two men who pulled him from his cockpit suffered burns when the Corsair caught fire. Shrapnel from the burst penetrated the hangar deck and pierced the wingtip fuel tanks of two F9F-5s, forcing the evacuation of the hangar deck due to fire danger from the leaking fuel. *Oriskany* was forced to cancel further flight operations for the day while repairs were carried out to the elevator.

On March 17, *Oriskany*'s air group attacked a mining complex. Despite heavy seas encountered at the end of the month, during the night of March 27–28 three volunteer pilots of the ship's VC-3 detachment flew a moonlight attack on the highway bridge outside Hamhung, one of the most heavily defended targets in North Korea, Flying at low altitude to evade enemy radar, they dropped the center span before the defenses could open fire. During the ship's time on station, the night-attack fliers had been able to attack artillery batteries at Wonsan. On another mission, two hecklers managed to chase two trains into the opposite ends of a single-track tunnel. The resulting collision sent "gratifying amounts of steam" out of the tunnel. Pilot morale in the group rose with the opportunity to bomb a North Korean rest camp reportedly set up for those communist troops credited with having shot down UN aircraft. When *Oriskany* departed her station, the crew was happy to learn they would be the second carrier to take an extended visit to the crown colony of Hong Kong. This would become a regular event, with one TF 77 carrier at a time "showing the flag" in the new liberty port.

Nearly half the missions flown in March by Task Force 77 were Cherokee Strikes. The tactic now was to strike the same area over several days, which was believed to increase success as antiaircraft defenses were degraded, allowing greater destruction of targets. However, with aircraft bombing from altitudes of 10–15,000 feet in level flight, there was an increase in "friendly fire" accidents, where the bombs fell on UN forces. The loss of four dead and 12 injured in two such incidents in January led to an edict from Seventh Fleet commander Admiral Clark threatening air group commanders and pilots involved in such incidents in the future with being relieved of command and possibly court-martialed for malfeasance; the result was greater caution in planning the strikes, with less ultimate effectiveness. During the six months of 1953, there was an average of three Cherokee Strikes per day on communist supply centers above the bomb line. The success in destruction of enemy resources through these missions resulted in the communists being forced to increase truck traffic, including dangerous daylight convoys, to make up losses. For the first time since 1951, the air groups reported more success in truck and vehicle hunting, while night hecklers found an increase in night traffic.

The increase in the number of jet squadrons aboard a carrier created difficulties for the ships that had yet to be modernized with improved catapults and arresting gear, particularly with the heavier F9F-5 and F2H-2 aircraft. *Boxer* commenced her fourth and final deployment of the war in May 1953, with Air Task Group 1 aboard. VF-52 and 151 flew the older – and lighter – F9F-2, while VF-111 had the newer Panther; the VC-61 detachment flew three F2H-2P Banshees and VF-194 operated AD-4 Skyraiders. The heavier F9F-5 had trouble getting into the air with a similar ordnance load to that carried by the F9F-2s using the older H4 catapults during the light wind days experienced in May and June. A swap was made with USS *Lake Champlain* (CVA-39), a modernized carrier equipped with H-8 catapults on loan from the Atlantic Fleet, to exchange VF-111's Panthers for VF-44's F4U-4 Corsairs on June 30.

Following the return of communist negotiators to the Panmunjom talks, hopes for a speedy negotiation were dashed when they rejected all the proposals to date, including the agreed-upon line of division in the peninsula that dated from the early days of the talks in 1951. Hopes rose in early May when the North Korean and Chinese negotiators agreed to the idea of neutral nations taking custody of all prisoners of war pending repatriation. However, they maintained the position that all prisoners must be repatriated, including those who did not wish to return home. This was a point on which the American negotiators would not change their position that repatriation must be voluntary; there was again a serious possibility of the talks breaking down completely, as they had in October 1952.

In the face of this, General Clark and the rest of the UN military command agreed that pressure tactics should be maintained and increased where possible, in the hope that – as Michener's Admiral Tarrant said – the point would come where UN forces would bomb a target that would cause the other side to finally see there was no possibility of winning and would agree to declare peace. Clark suggested that the UN forces prepare a limited land offensive and possibly an actual amphibious assault no later than September 1953. At the same time, new Secretary of State John Foster Dulles intimated in discussions with Indian Prime Minister Jawaharlal Nehru that the Eisenhower administration might be prepared to allow a UN air offensive against China's Manchurian air bases. It was also revealed that nuclear-capable bombers were now positioned in Japan, though no confirmation came as to whether atomic weapons had actually been moved into the country. This information was immediately relayed to the Chinese, and it ultimately did have the effect of convincing them to end the war when they did, before such events could happen.

As part of the strategy to increase pressure on the enemy, the continuing campaign against the hydroelectric complex saw eight F-84s of the 474th FBG attack the Suiho complex again on May 10. The bombers placed three delayed-action bombs in the powerhouse and departed without loss, while the F-86 escorts from the 4th FIW were involved in a fight, claiming two MiG-15s shot down without loss, while the communists claimed one F-86 shot down, with a MiG-15 subsequently shot.

Following this strike, other strikes were made on the north's irrigation dams, 20 of which provided 75 percent of the water for the country's rice production, with the intention of damaging or destroying the dams in order to flood North Korean fields just after spring planting, which would destroy a year's supply of rice. It was hoped this would create a food shortage among communist troops, since Chinese food production would not be sufficient to make up the loss, while North Korean food exports to China would be affected. In fact, the food shortage that did result was mostly experienced by North Korean civilians, since the authorities gave priority to getting supplies to the front lines.

The first strike against the irrigation system was against the 2,300-foot earth-and-stone Toksan Dam, 20 miles north of Pyongyang on the Potong River. On May 13, 59 F-84s from the 58th FBW dropped two 1,000lb bombs each; initial reports appeared disappointing, but the next day photographs taken by an RF-80 showed complete destruction. Seven hundred buildings had been swept away in the floods that inundated five square miles of rice paddies, while Sunan airfield was now underwater, along with two miles of the adjacent highway. The raid had created more destruction to the enemy's transport system than had been accomplished in a month of interdiction strikes. Two days later, the Chasan Dam was hit by F-84s; the first strike was ineffective, but a second mission cracked the dams, inundating several miles of rice paddies and destroying half a mile of rail line. The Kuwonga Dam was bombed by B-29s on the night of May 29–30. Anticipating the attack, the communists had lowered the water level, which reduced the effectiveness; however, they were later forced to drain the reservoir completely, which completely deprived the local rice crop of the water it needed.

During *Princeton*'s deployment at the beginning of her final Korean tour in April–May nine pilots were shot down, with seven killed or missing. One of the more interesting stories to come out of the war at this time was that of "The Bluetail Fly," which involved Lt (jg) Richard "Stretch" Clinite of VF-153, who was one of the seven dead. At this final period of the war, the Panther had become difficult to obtain. The combination of the many losses and high number of aircraft that were damaged by the increasingly effective enemy antiaircraft defenses meant carrier maintenance personnel were forced to become creative in order to keep aircraft in commission. Clinite's assigned F9F-5 was in the experimental unpainted aluminum finish. The airplane was hit in the tail section by flak on May 5, resulting in heavy damage. It appeared the Panther would be grounded until the ship returned to Japan where the extensive repairs could be performed. However, shortly after Clinite's plane was hit, the blue-painted Panther flown by Ensign W. A. Wilds sustained heavy flak damage to the forward fuselage. The maintenance crews took the tail from Wilds' blue Panther and mated it to Clinite's silver airplane in an all-night hangar deck session. The result was named "The Bluetail Fly." Clinite flew it on several missions until May 12, when it was so badly damaged by flak it was permanently grounded for major repair. The next day, Clinite was in another Panther and took a major flak hit, forcing him to eject over the sea. Unfortunately, Clinite drowned when his parachute was unable to collapse due to the wind; the rescue helicopter was unable to pull him to safety with the billowing chute. By the Vietnam War ten years later, VF-153 had become VA-153, flying A-4 Skyhawks; the squadron painted their tails blue for identification, and took the name "Bluetail Flies" in memory of this event.

There had been an ostentatious stockpiling of supplies, even in the face of continued Cherokee Strikes. On June 10, the anticipated offensive began with a heavy attack through the valley of the upper Pukhan aimed at the ROK II Corps, which again collapsed when contact was made. Task Force 77 pilots flew non-stop maximum-effort close air support missions between June 10 and 17. With movement of other UN forces to fill the gap and massive air support from Navy, Marine and Air Force units, the front was stabilized once again by June 18, with UN forces having given up a few miles of territory above the Hwachon Reservoir and some ground over on the east coast. This was accomplished with the naval air forces being more heavily committed to close air support and battlefield interdiction than they had been since 1950.

Through the month of June, four carriers operated in the Sea of Japan: *Boxer*, *Princeton*, *Philippine Sea*, and the Atlantic Fleet carrier USS *Lake Champlain* (CVA-39) that had relieved *Valley Forge* upon her arrival on June 9. This was a concentration of force that had not been seen since the hydroelectric complex strikes a year previously. *Lake Champlain*'s Air Group 4 included VF-22 and 62, both operating F2H-2 Banshees, and VF-44, with F4U-4 Corsairs and VA-45's Skyraiders. The ship was the first carrier to operate Douglas F3D-2 Skynights aboard, with four of the big jets assigned to the VC-4 Detachment N. It was soon obvious that the Skynight was not a good fit on a carrier, and the detachment went ashore, where they flew with VMF(N)-513 on missions over North Korea to support the raids by B-29s.

Lake Champlain arrived on station with Task Force 77 on June 14; Rear Admiral W. D. Johnson, commander Carrier Division One aboard the carrier, relieved Rear Admiral R. E. Blick, Commander Carrier Division Three aboard *Philippine Sea* as officer in tactical command and Commander Task Force 77. The newcomers got right into the thick of things on their first day of operations on the line, flying 113 sorties, upping that to 147 the next day, June 15. Over the next two days, the low ceilings and haze that were such a part of summer in Korea dropped the sortie rate by a third.

Air Group 4 suffered their first loss on June 19 when Lt (jg) D. E. Brewer's AD-4N was shot down by enemy antiaircraft fire while bombing the rail line. Between June 20 and 23, air operations were canceled altogether due to low clouds and fog from a deep cold front over the Sea of Japan. At the end of the month, the carrier departed the Sea of Japan for Yokusuka. While in port, VF-44's Corsairs were exchanged for the F9F-5 Panthers of *Boxer*'s VF-111, giving Air Group 4 an all-jet fighter-bomber force.

During the enemy's June offensive, aerial reconnaissance had discovered the communists were making repairs to airfields in North Korea, and some Yak-9 and La-11 prop fighters were spotted. The proposed armistice agreement included a clause that prevented the introduction of troops or other military units into the country while the armistice was in effect. Clearly, the repair activity meant they were prepared to fly MiG-15s into the country before the armistice was signed. It was crucial that the enemy not be allowed to operate aircraft from North Korean fields to support the Chinese and North Korean armies on the MLR, and Task Force 77 began a series of strikes in cooperation with the Air Force against these airfields in early July, in addition to the close air support and Cherokee missions. After the war, it would be revealed that the communists had flown 200 MiG-15s to the grass airfield at Uiju that was not thought capable of operating jet aircraft during the period of bad weather, and the aircraft had been hidden in the surrounding countryside as the foundation of the postwar North Korean People's Air Force.

Cherokee strikes became progressively more dangerous, with the enemy moving numerous heavy radar-directed 85mm and 76mm cannons into the supply areas in response to the relatively high-altitude missions flown by the Navy. A standard approach now was to come over at 20,000 feet, initiate a dive and drop at 16–18,000 feet. This precluded real dive-bombing accuracy, but since the target was a large enemy supply depot, it was considered sufficient to do the job while providing some safety from defensive fire for the pilots.

With the front stabilized, the UN command now faced a crisis created by the South Korean government. On June 18, President Syngman Rhee stated his government would not accept any agreement that left Korea divided, and threatened to withdraw the ROK Army from UN command and launch a unilateral offensive against the communists. ROK forces at this time constituted 70 percent of UN troops on the MLR. This was coupled with the release that night of 25,000 anticommunist Chinese and North Korean POWs held by ROK forces in camps throughout South Korea; these were the men whose fate had been the major obstacle in negotiations.

In a midnight meeting in Washington of Eisenhower administration top officials, it was decided that if the enemy were to launch an offensive in response to Rhee's actions, the United States was willing to carry the air war to mainland China, using nuclear weapons on Okinawa delivered by Strategic Air Command. "Silverplate" B-29s of the 509th Bomb Wing were ordered to deploy to the island.

Bad weather in late June and early July prevented aerial reconnaissance of communist activity and it was not until July 12 that there were major communist troop concentrations opposite the US IX Corps and ROK II Corps.

The Chinese and North Korean armies began the final offensive of the war on the night of July 13–14. North Korean troops advanced down the Pukhan valley again, against the ROK II Corps, which this time managed to retreat in good order, rather than break as they had the month before.

Over the next week, Task Force 77's carrier air groups flew their most intensive operations of the war. Admiral Clark flew to Japan to plead with General Clark to allow the nuclear-capable Banshees stationed in Japan to be put aboard his carriers with their weapons. The general agreed, and Task Force 77 soon had a nuclear capability aboard the carriers, should it be necessary to carry out the strikes beyond the Yalu that seemed necessary in the face of this all-out communist offensive.

Fortunately, the conventional forces in Korea were able to withstand the offensive, and the front was again stabilized by July 20 at a cost to the North Koreans and Chinese of 72,000 men for three miles of territory. The day before, with the offensive coming to a halt, the communist negotiators at Panmunjom indicated they were willing to sign an armistice. The Rhee government in Seoul was threatened with the withdrawal of all US aid if they did not agree, and cajoled with the promise of a major increase in aid for their participation in the armistice, which they reluctantly agreed to. The armistice was finally signed at 1000 hours on July 27, 1953, to take effect at 2201 hours that night. During the final 12 hours of war, Task Force 77 continued to launch strikes against airfields and transportation networks. On the last day of the Korean War, the Navy fliers destroyed or damaged 11 railroad bridges, a railroad tunnel, nine highway bridges, 23 railroad cars, 69 buildings and 100 yards of trenches. Five airfields from Hyesanjin on the Yalu border to Hamhung were cratered.

At 2135 hours, VMA-251's Captain William J. Foster rolled his AD-4 Skyraider into a dive and dropped three 1,000lb bombs on a communist position in the front line. It was the last act of the war by a naval or Marine aviator. The Korean War ended 25 minutes later, as an armistice, not peace, began.

CHAPTER 19

THE WAR ASSESSED

The Korean War demonstrated both the value of naval aviation and the limits of its power to influence a war's outcome.

The Pyongyang strikes by *Valley Forge* and *Triumph*, coming nine days after the outbreak of war, when no other UN force in the region could have performed such a mission, was naval aviation's most important single contribution to the outcome of the war, since it led directly to the decision by Stalin not to provide direct Soviet support to the North Korean invasion, and led China to delay any thought of participation. Without this strike and these results, it is difficult to believe that Western forces could have remained on the Korean peninsula, and that the North Korean action would not have become a *fait accompli*.

In so doing, *Valley Forge* and her air group disproved all the critiques aimed at naval aviation in the years after World War II. At no time in the 68 years since has there been any serious question of the strategic importance of the aircraft carrier.

That said, the Korean War also demonstrated the limits of naval air power and its ability to influence a war's outcome, a limit that was run up against again ten years later in Vietnam. While the front-line battles of both wars would have had a far different outcome without the power of tactical close air support provided by aircraft carriers when other air forces were unable to do so, the employment of carrier air power in a "strategic" sense was ultimately only successful in Korea in limiting the enemy's ability to build up their front-line strength. This has largely been the maximum contribution naval aviation has been able to make in all US wars since Korea.

Korea profoundly changed the way carrier aviation was employed by the Navy. From the beginning, believers in carrier aviation had seen its potential as the long-range striking power of the fleet in opposition to other fleets. The correctness of this strategic view had been completely vindicated in the Pacific War. But in Korea, the carrier became a floating airfield that could place an air force in a position to attack enemy forces that could not be accomplished otherwise. The USAF in Korea had no way to sustain aerial attacks against North Korean and Chinese forces in northeastern North Korea, due to the distances involved from airfields ashore. Task Force 77 made that region of the country its own operating area, moving the airfields as necessary to allow attacks where they would do the most good. As one naval aviator put it, the Korean air campaign was "a long, hard slog." It was mostly devoid of any of the drama associated with the actions of the Central Pacific campaign half a decade earlier. All post-Korea experience of the Navy has reinforced this view of carrier aviation.

The Navy's fifth Korean Evaluation Report recognized this change:

> The attempt to deprecate as exceptional and special the circumstances of carrier operations off Korea should be tempered ... Carrier task forces may, in the conduct of limited objective wars in the Far East, be forced hereafter to accept small and inadequate screens, the calculated risk of enemy submarine attack, and incessant danger from shore-based enemy aircraft. Forces may discover that operations within fifty to one hundred miles of an unfriendly coast are necessary to provide assistance to our forces or allies. Instead of terming these "special" conditions, commanders must comprehend that future operations off Asia, from Indonesia to Kamchatka, may require actions not unlike those now a matter of daily routine off Korea.

As far as the use of air power in the Korean War is concerned, the facts are that outside of the Pyongyang strikes by *Valley Forge* and *Triumph*, and the close air support provided by naval and Marine aviators during the battles in the Pusan Perimeter, turning back the Chinese in 1951 and holding the lines at the end of the war, UN air power did not play a decisive role in the outcome of the war as it had in World War II, despite devising new tactics and strategies to deal with the enemy. The North Koreans and Chinese were incredibly resilient, able to maintain themselves on the front line on a far lower level of supplies than was necessary to support UN troops. No matter what was attacked, the enemy found ways to repair it or do without it. While they were fought to a standstill, the strategy that was pursued both on the front lines and at the bargaining table, which seemed illogical at the time, was in hindsight terrifically logical, in that the strategy pursued stymied the UN forces and created political chaos in their home countries. The same would be true ten years later.

The results that were achieved must be balanced against the losses inflicted. The United States Air Force lost the equivalent of 20 fighter groups. Navy and Marine losses totaled 564 aircraft in direct combat, the equivalent of six carrier air groups. While an aircraft lost in World War II averaged $60,000 in individual cost, such a loss in Korea had risen to approximately $250,000. Trading a quarter-million-dollar airplane for a $1,000 truck was not an economic equation that could be indefinitely maintained.

The losses in individuals cannot be subjected to such analysis. When Richard Clinite, the pilot of "The Bluetail Fly," was killed, his squadron commander wrote:

> You didn't want to lose anybody. You wanted to have the best record in everything. But when I lost this young man, I literally came unglued, I really was emotionally shaken. I still remember walking the flight deck most of the night, crying like a baby. I stayed outside. I couldn't go to my room. I couldn't go to the ready room or anywhere else. One man did it to me. And to this day, as you can see now, I start crying when I think of it.

On average, a carrier air group operating in the Korean War lost 10 percent of its pilots during a deployment. In World War II, the Eighth Air Force was nearly forced to stop operations in the fall of 1943 when the loss rate exceeded 8 percent over a four-month period.

The bomb tonnage dropped on North Korea between the summer of 1950 and the summer of 1952 exceeded that dropped by naval and army air forces in the Pacific War from Pearl Harbor to V-J Day. By the end of the war, the total tonnage dropped exceeded what had leveled both Japan and Germany. Five years earlier, such an effort directly led to victory; that was not the case in this war.

There is finally the argument that the United States created the conditions that led to the Korean War through the massive military reductions forced by President Truman, which were revealed for all to see in terms of their effect during the congressional hearings involved in the "Revolt of the Admirals," in which the United States' "Europe-only" strategic focus led Stalin to believe the United States would not respond to aggressive moves in the Far East, a mere two months before Kim Il-Sung would propose exactly that. Dean Acheson's badly stated definition of American interests in the Far East made in January 1950, which appeared to exclude the Korean Peninsula, reinforced this belief on the part of both Stalin and Mao.

And finally, there was what French historian Marc Bloch described as the most important political point: "Misunderstanding of the present is the inevitable consequence of ignorance of the past." There was no one of any authority in the American government at the time who had any understanding of the history of Korea; such knowledge might still not have prevented the war, but it would have informed decision-makers who found the intransigence of men who had devoted their lives to national independence and the end of colonial rule to be "irrational" in their failure to accede to Western military superiority. This would again be the case ten years later.

What is indeed unfortunate is that in the 65 years since the end of the Korean War, the United States is still ignorant of this past, which may yet lead to an unimaginably tragic misunderstanding of the present.

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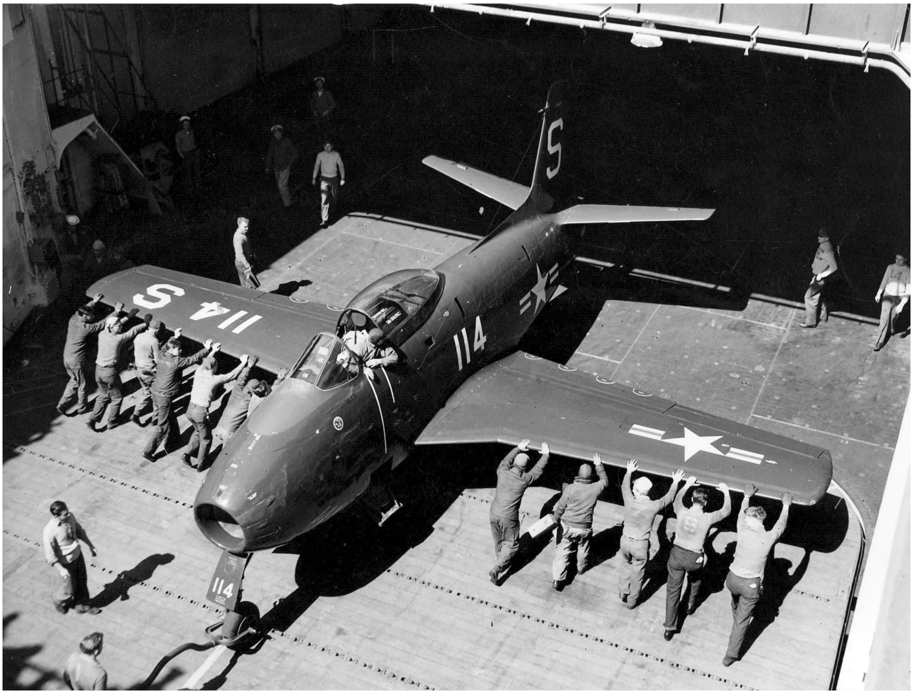
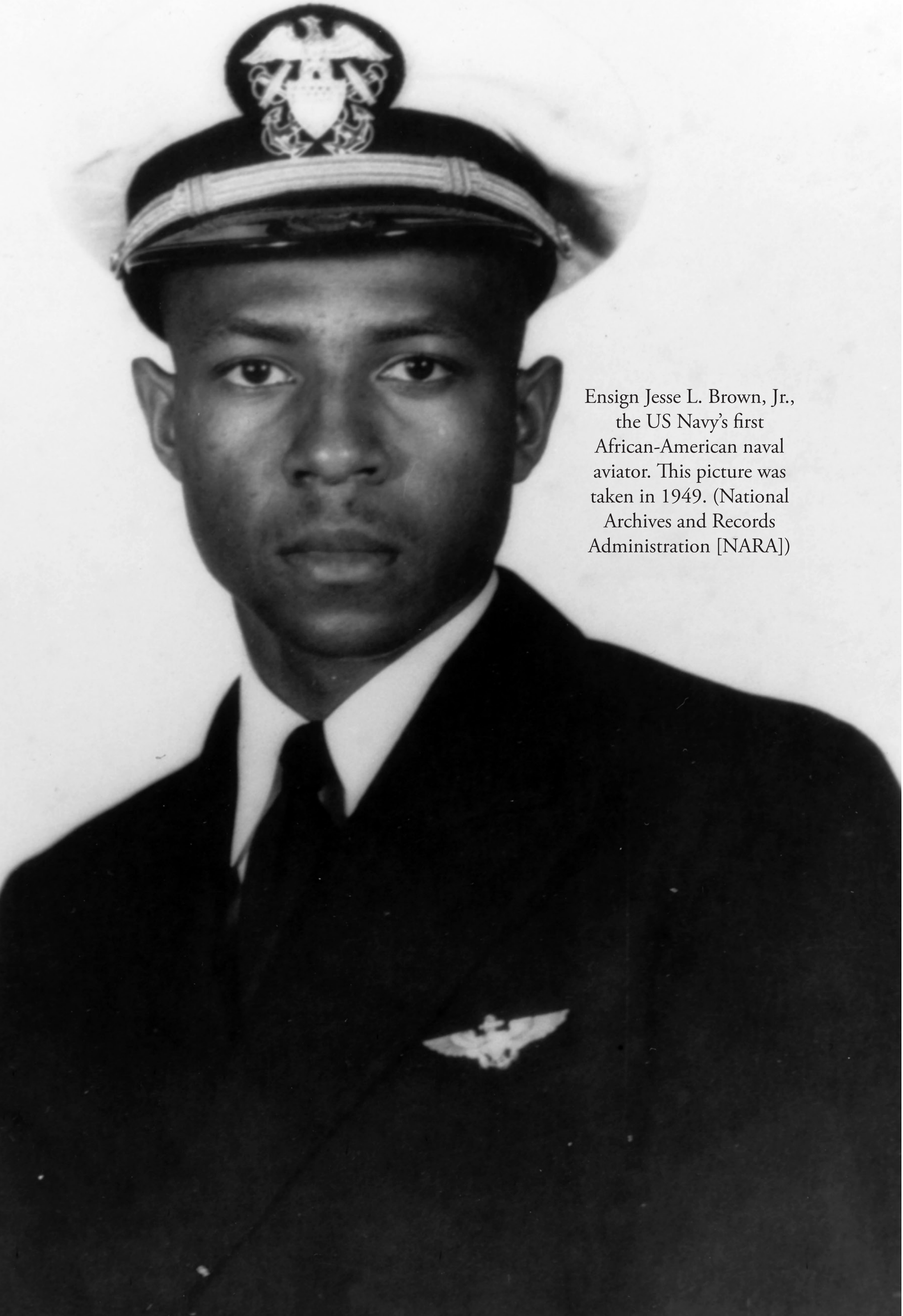


An FJ-1 Fury of VF-5B aboard USS *Boxer* in 1948.
(U.S. Navy National Museum of Naval Aviation)

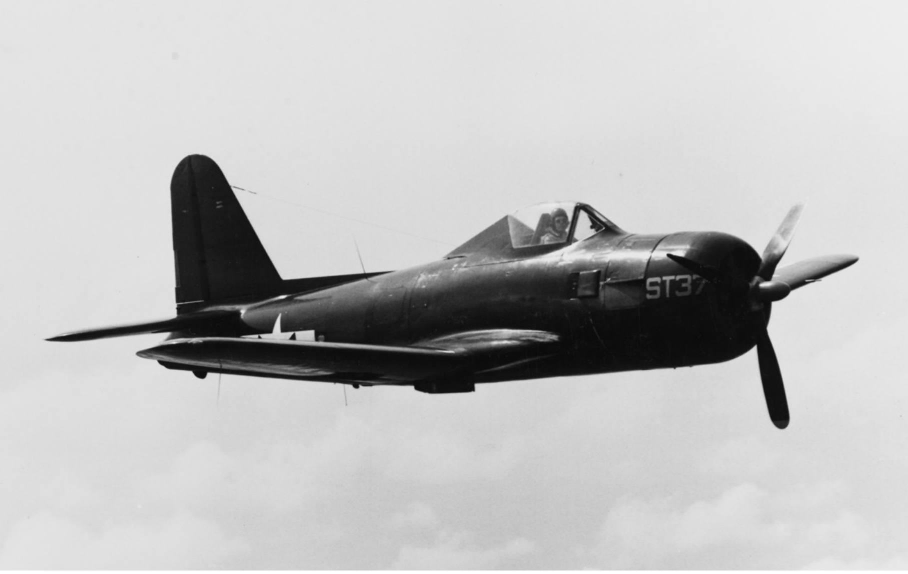
The Convair B-36 intercontinental bomber ignited a post-war controversy over service supremacy that led to the “Revolt of the Admirals” in 1949. (USAF)



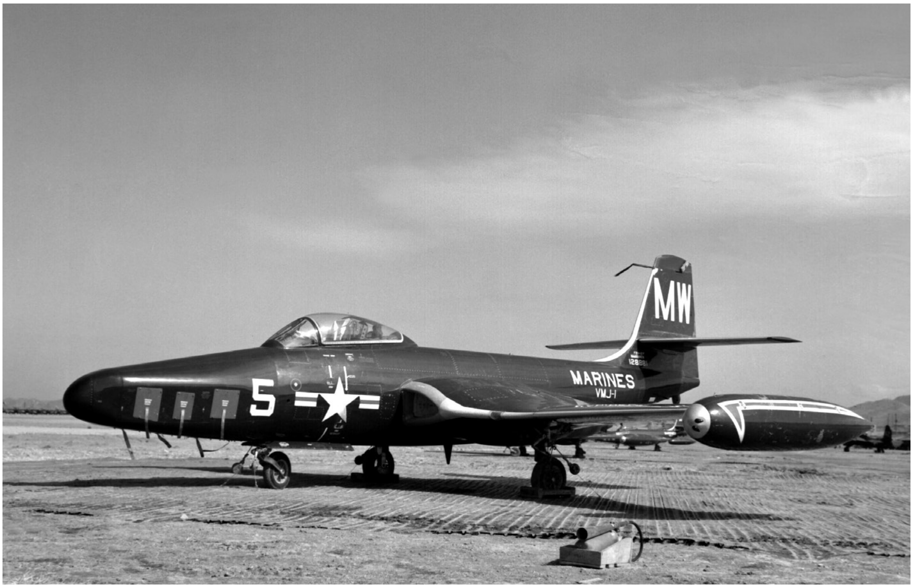
Ensign Jesse L. Brown, Jr., the US Navy's first African-American naval aviator. This picture was taken in 1949. (National Archives and Records Administration [NARA])

A Lockheed P2V-3 Neptune makes a JATO takeoff from USS *Midway* in 1949, demonstrating the Navy's ability to launch strategic bombers armed with nuclear weapons. (NARA)

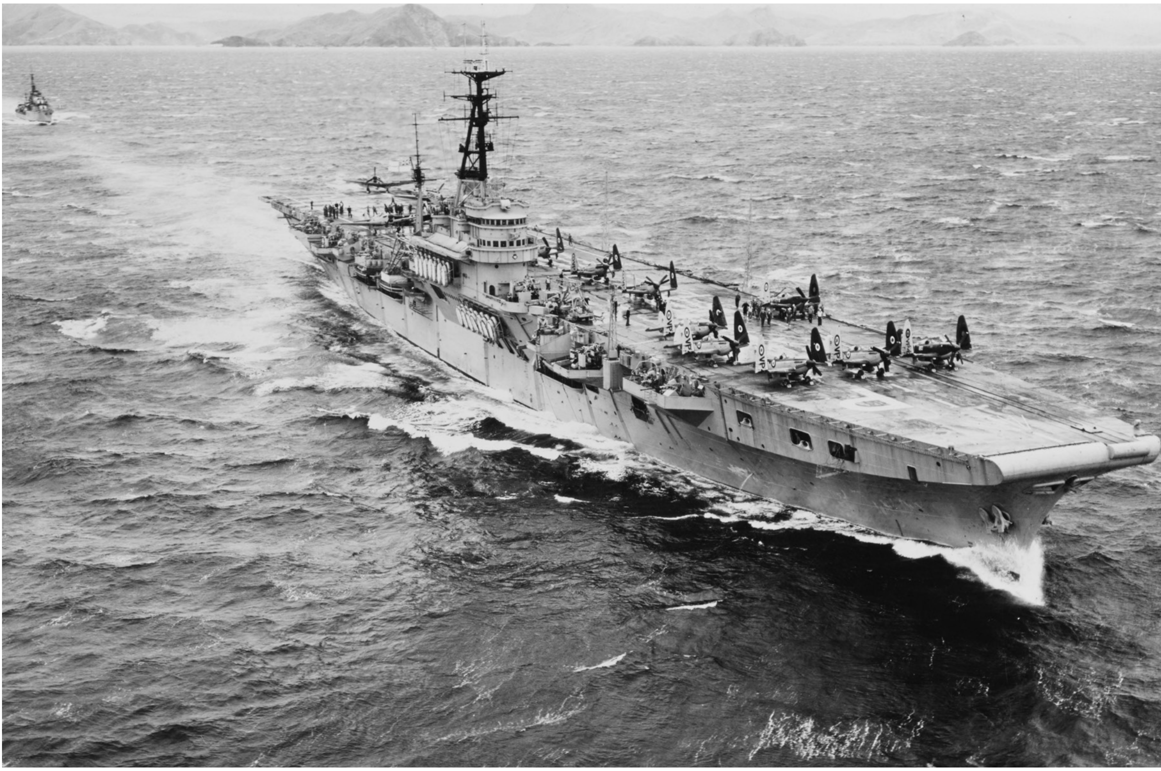
FJ-1 Furies of VF-51 aboard USS *Princeton* in 1949, shortly before their retirement from first-line service. (U.S. Navy National Museum of Naval Aviation)



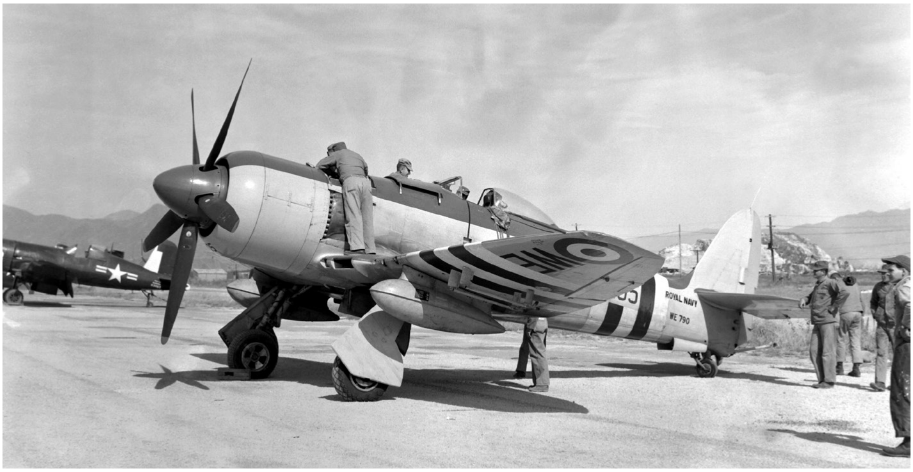
The Ryan FR-1 "Fireball" fighter was the US Navy's first venture into operating a jet-powered carrier fighter. The aircraft was powered by an R-1830 radial engine and an I-16 jet engine for additional power in-flight.
(Naval History and Heritage Command [NHHC])



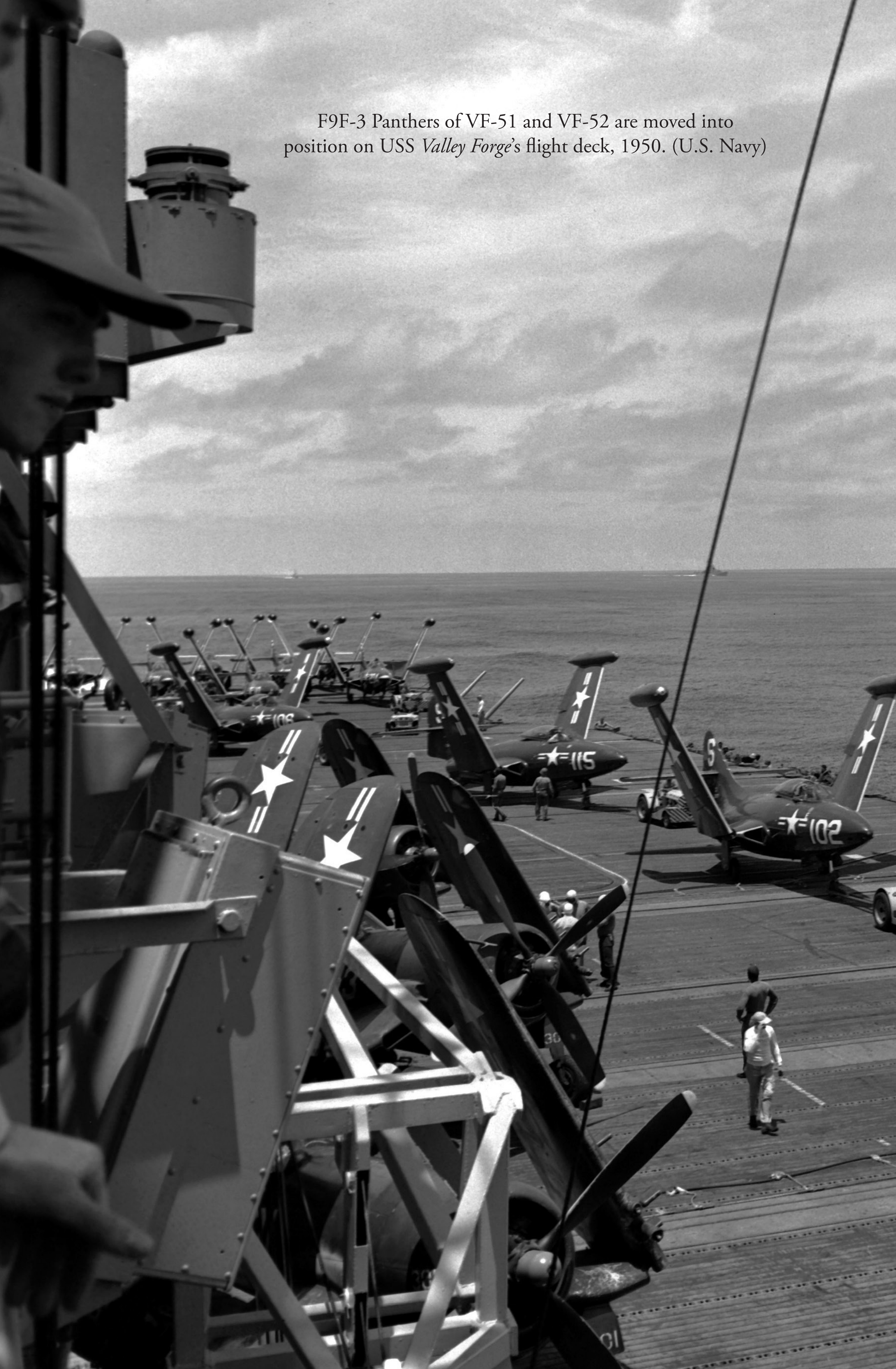
The McDonnell F2H-2P Banshee was the most effective naval photo reconnaissance aircraft used during the Korean War. It was fast enough that pilots recalled Air Force escorts in F-86 Sabres had to fly at full throttle to keep up, frequently running low on gas as a result, leaving the Banshee to complete its mission alone. (NARA)



HMS *Triumph* and her air group of 12 Seafire 47s and 12 Firefly Is provided crucial support to UN forces at the outbreak of the Korean War in 1950. (NHHC)

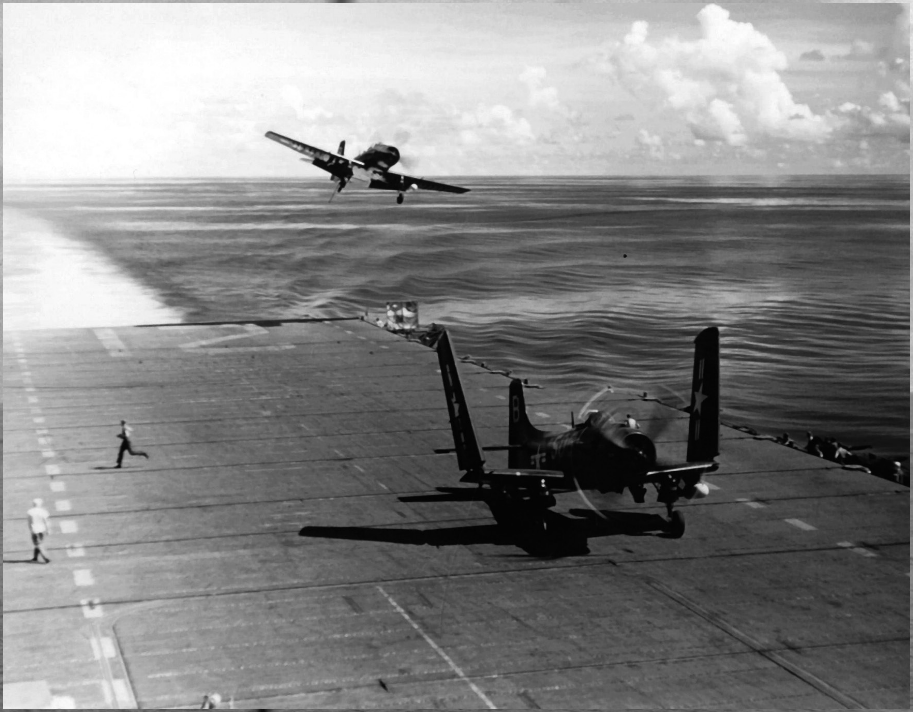


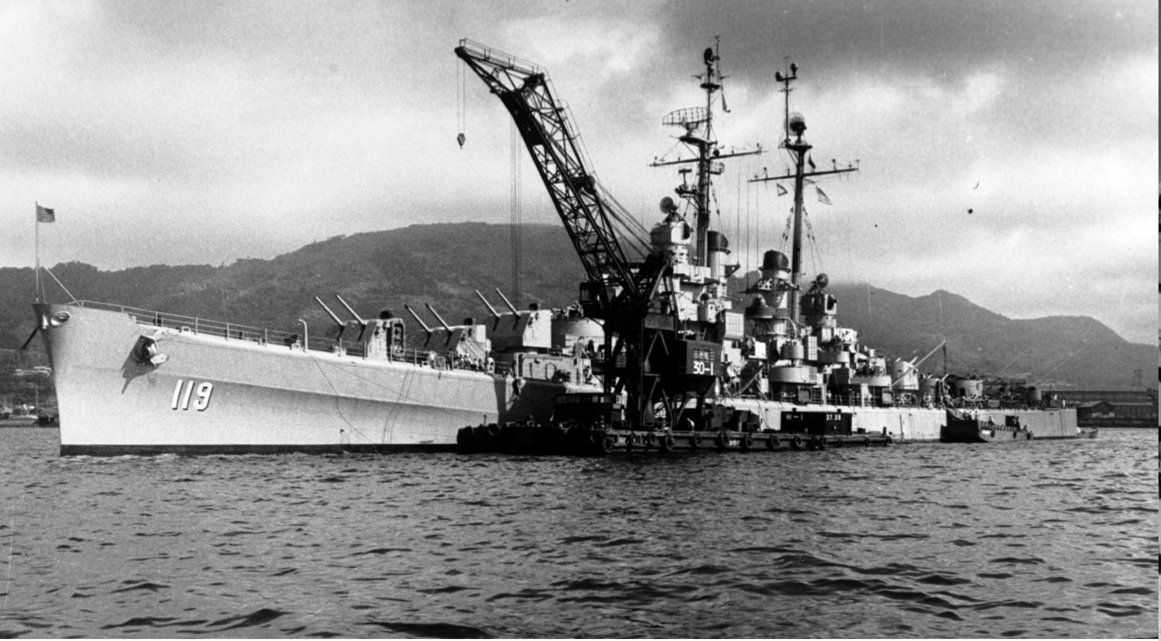
Marine Corps mechanics servicing a Royal Navy Hawker Sea Fury FB.11 that operated from HMAS *Sydney*. A Vought F4U-4 Corsair is in the background. By the end of the war, it was no longer necessary to paint the aircraft with the black/white ID stripes. (NARA)



F9F-3 Panthers of VF-51 and VF-52 are moved into position on USS *Valley Forge*'s flight deck, 1950. (U.S. Navy)

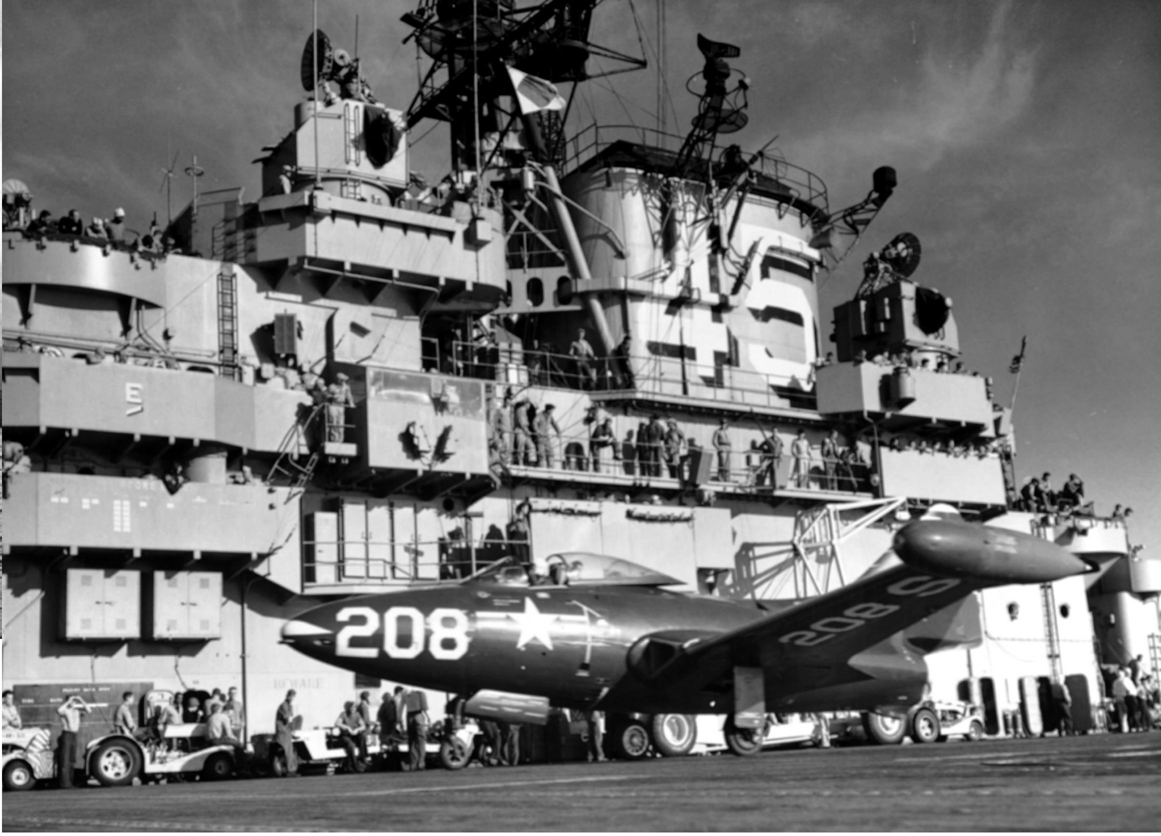
Below A VA-195 AD-3 Skyraider takes a wave-off as the plane ahead of it folds its wings before taxiing out of the arresting wires aboard USS *Princeton*, *c*.1950. (U.S. Navy National Museum of Naval Aviation)



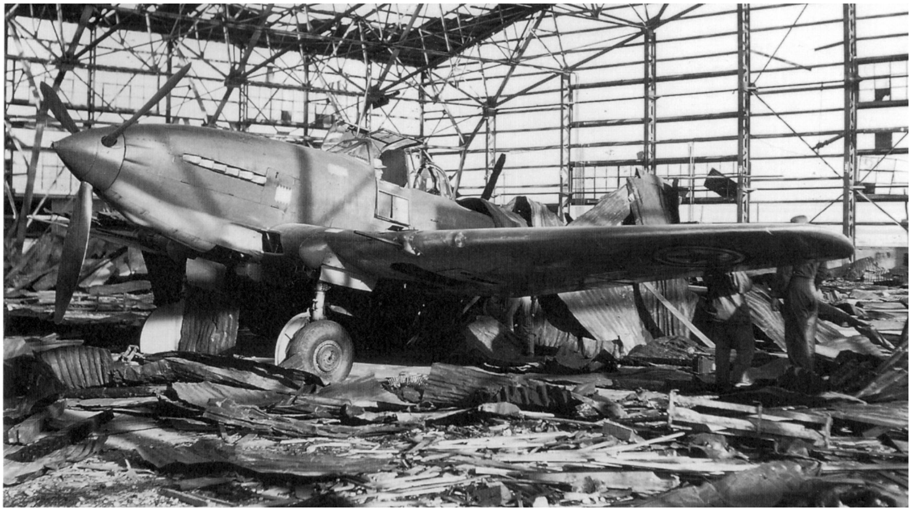


USS *Juneau* replenishing at Sasebo after operating off Korea, summer 1950. (NARA)

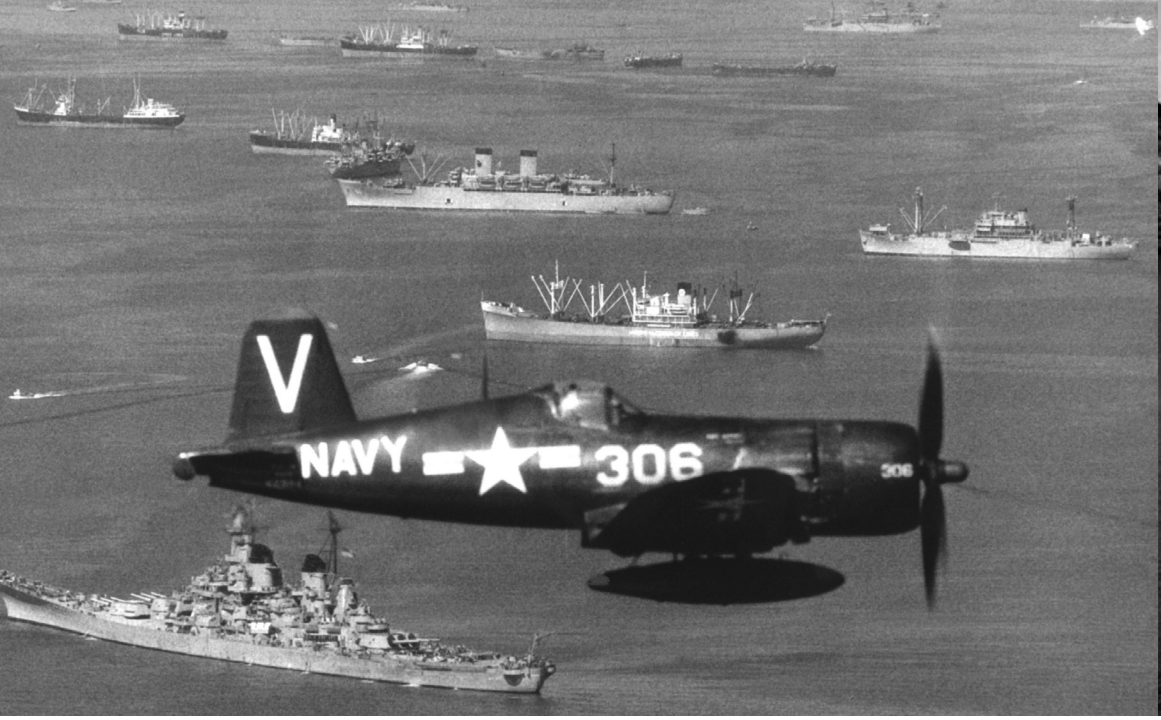
An F9F-2 Panther of VF-111 aboard USS *Philippine Sea*, July 4, 1950. (NARA)



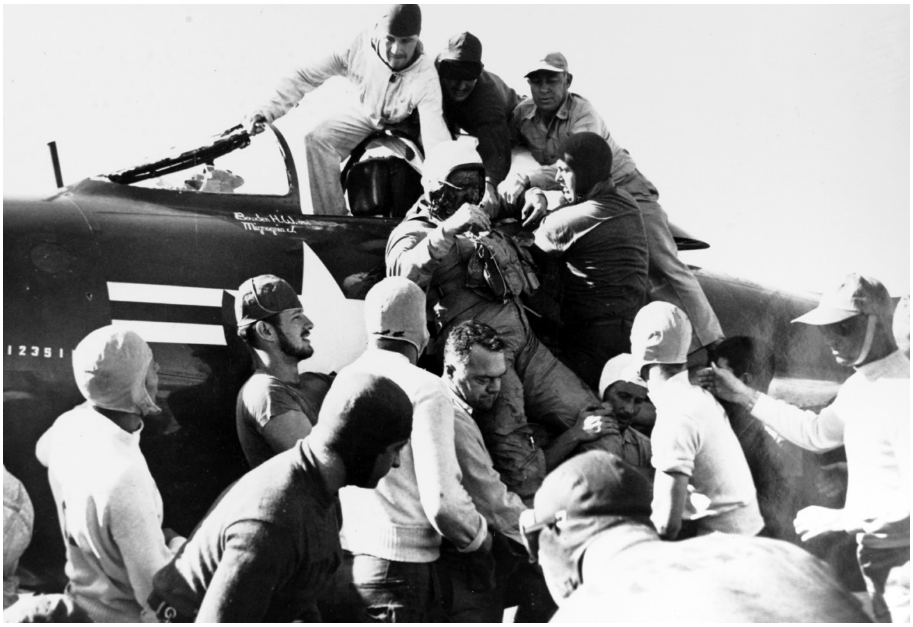
An F9F-2 of VF-52 prepares to launch from USS *Valley Forge*, July 19, 1950. A scoreboard can be seen on left of the island. (NARA)



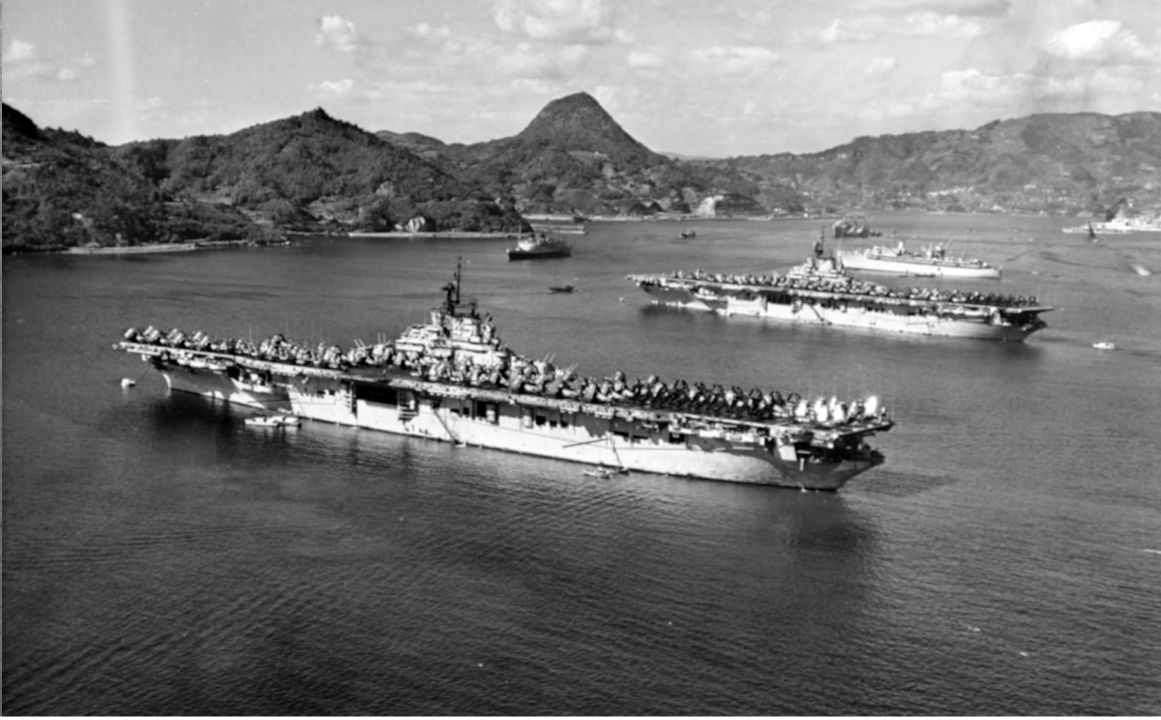
An Il-10 of the North Korean People's Air Force (NKPAF) found abandoned at Kimpo airfield following the invasion of Inchon and liberation of Seoul in September 1950. (NARA)



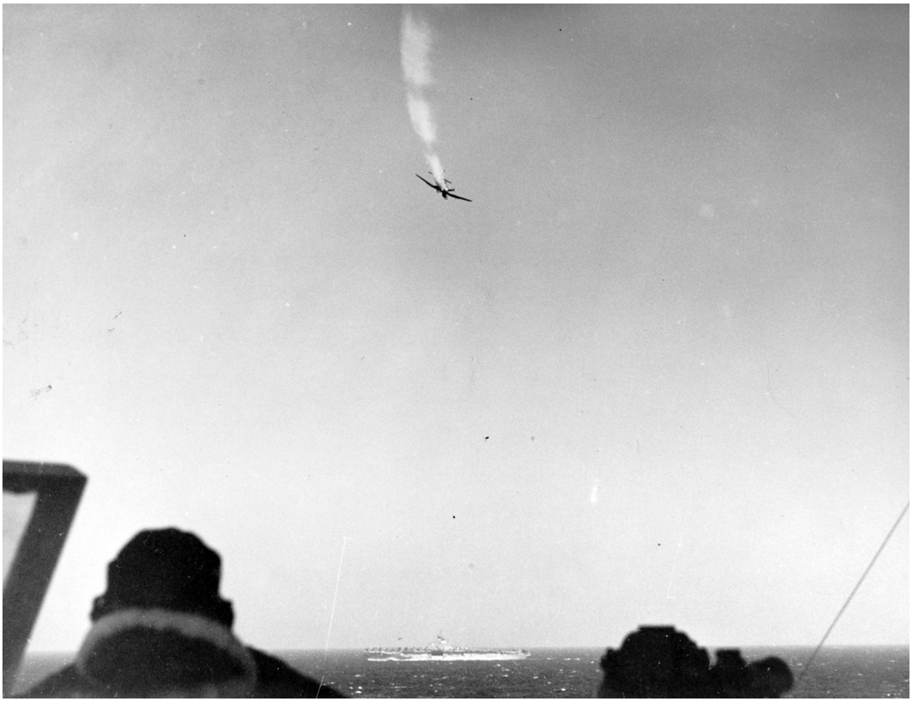
An F4U-4B of VF-113 from USS *Philippine Sea* overflying US ships at Inchon, Korea, September 15, 1950. The battleship *Missouri* can be seen below the Corsair. (Air and Space Museum)



Lt(jg) Ed Jackson is helped from his F9F-2 after landing aboard USS *Philippine Sea* on September 17, 1950. He was blinded after he collided with an anti-aircraft cable over a river in North Korea. (NARA)



USS *Valley Forge* and USS *Leyte* at Sasebo, October 1950. (NARA)



An F4U-4 Corsair crashes off *Valley Forge*, October 22, 1950. (NARA)

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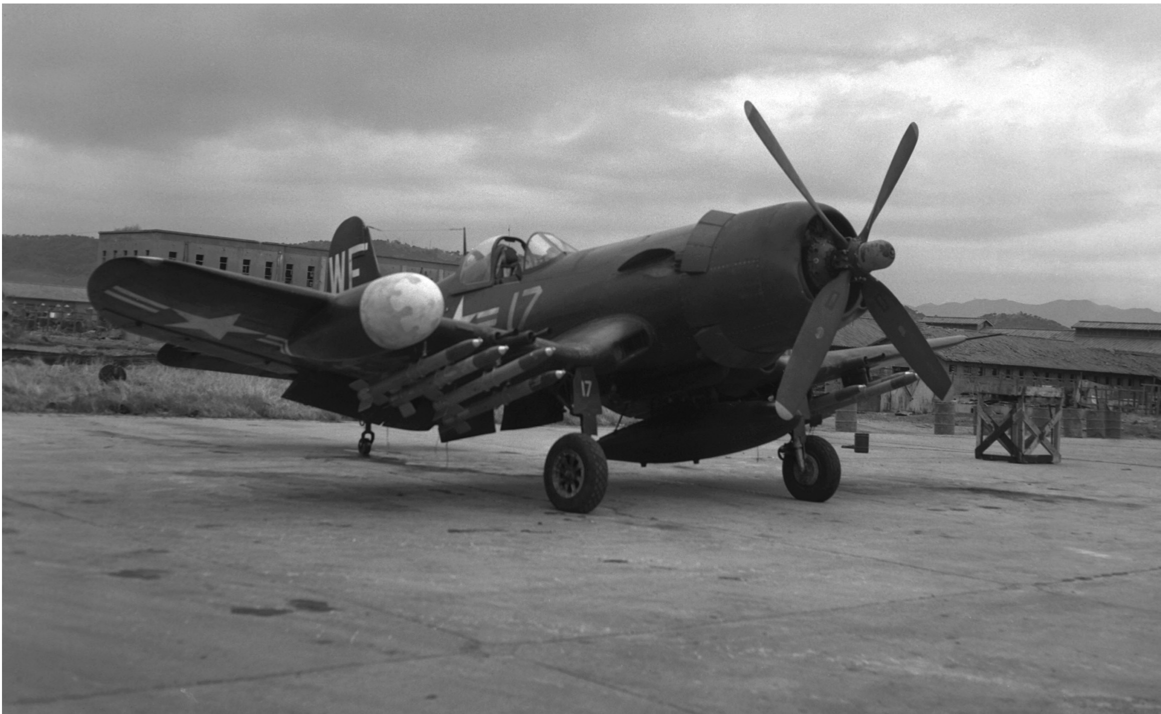
An AD-3 Skyraider armed with two 1,000lb bombs and eight 100lb fragmentation bombs takes off from USS *Philippine Sea* in November 1950. (U.S. Navy)

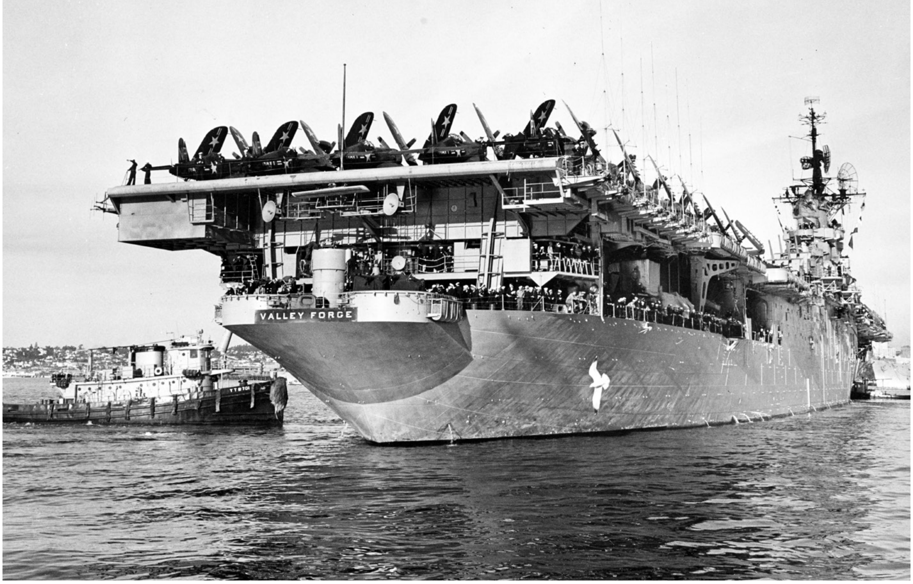
Bombs explode around the Sinuiju bridge across the Yalu in November 1950. (NARA)

A North Korean train is strafed and bombed by Navy fliers. (U.S. Army Military History Institute)

VMF(N)-513 was one of the first Marine squadrons to arrive in Korea in August 1950. The squadron operated their Corsair night fighters against enemy supply efforts throughout the war to the end. This plane was photographed on November 2, 1950. (NARA)



VF-31 pilots aboard USS *Leyte* help enlisted men belt 20mm cannon shells, November 7, 1950. (NARA)



USS *Valley Forge* prepares to depart San Diego, December 1950. *Valley Forge* returned from her first Korean tour at the end of November 1950 and made a rapid turnaround to return in the face of the emergency created by the Chinese intervention in the Korean War. (NHHC)

A Skyraider crash lands aboard USS *Philippine Sea* on December 12, 1950. (NARA)

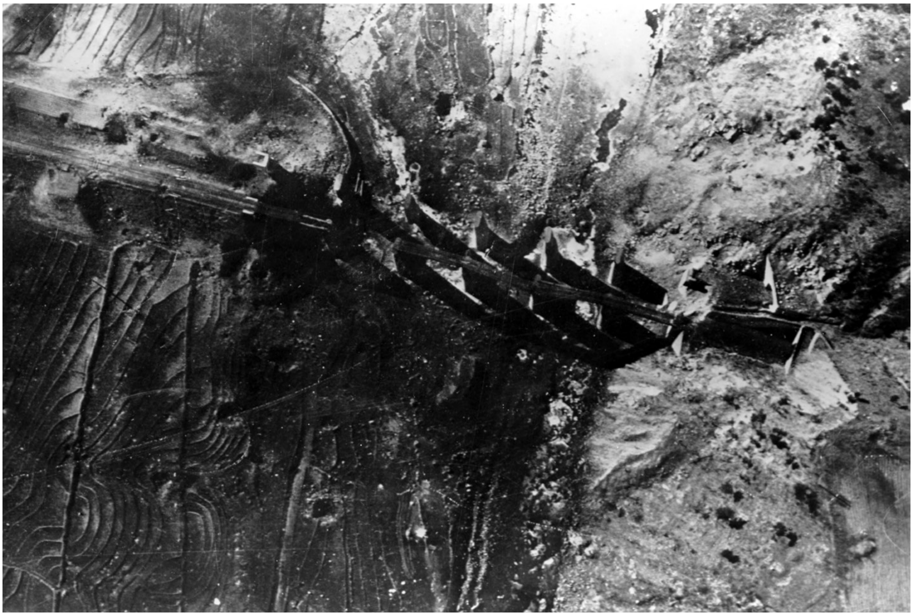
A Sikorsky HO3S-1 “Horse” of Marine Hedron-33 in Korea, December 13, 1950. The HO3S-1 was the first really successful combat helicopter. (NARA)

USS *Missouri* looses a broadside of 16-inch shells from her main battery off North Korea, December 26, 1950. (NARA)

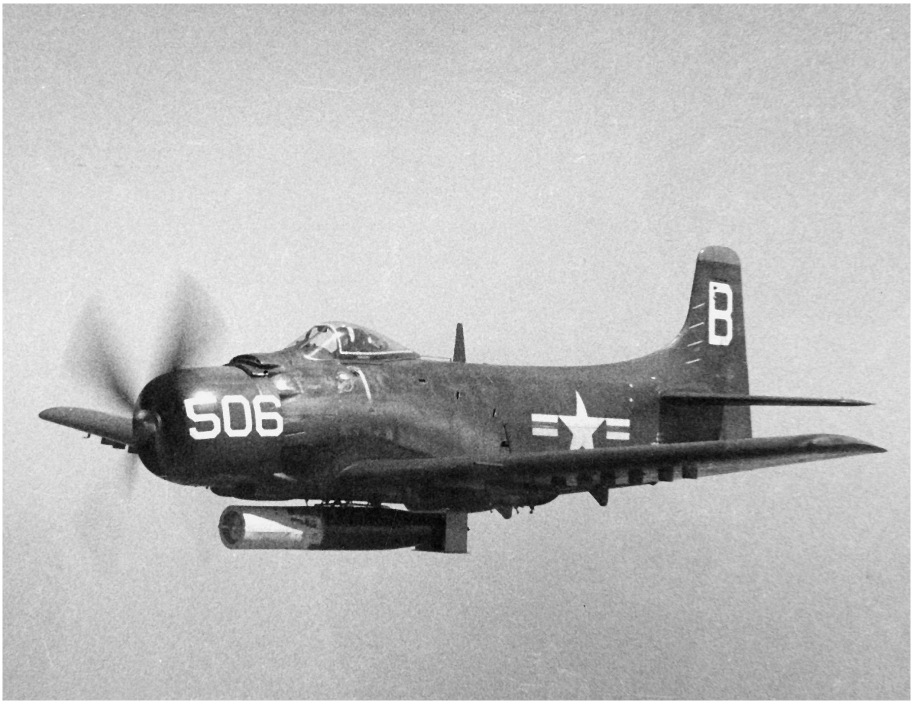
VMF-323 operated its Corsairs off USS *Sicily* during the Pusan Perimeter fighting, where their close air support was crucial to UN forces holding out against two major North Korean offensives. The carrier was commanded by legendary naval aviator Captain John Thach, inventor in World War II of the "Thach Weave." (U.S. Navy National Museum of Naval Aviation)

An AD-4Q Skyraider modified for electronics countermeasures of VA-35's detachment aboard USS *Essex* in 1951. (U.S. Navy National Museum of Naval Aviation)

AD-2 Skyraiders bomb a rail target in North Korea in 1951. (U.S. Navy National Museum of Naval Aviation)

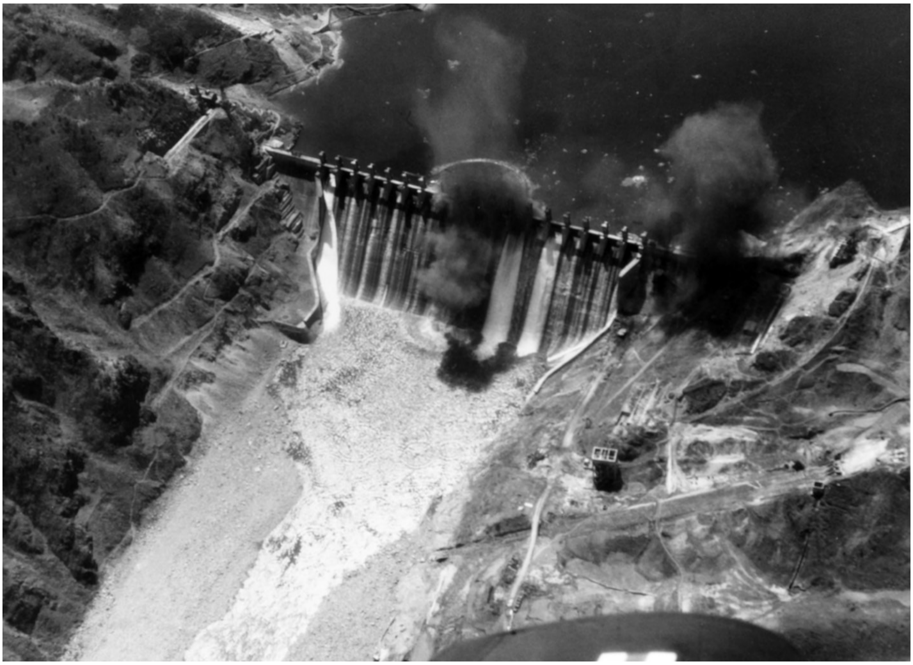


A downed bridge in "Carlson's Canyon," March 1951. Within two weeks the bridge had been shored up and was very nearly operational. (NARA)



A VA-195 Skyraider with the Mark 14 aerial torpedo used to attack the Hwachon Dam in April 1951. (U.S. Navy)

Lt(jg) Ed Phillips was one of three VA-195 pilots who had ever dropped an aerial torpedo. He took part in the torpedo attack on the Hwachon Dam in April 1951, the last combat use of aerial torpedoes. (U.S. Navy)



The Hwachon Dam suffers hits from USS *Princeton*'s VA-195, May 1, 1951. (NARA)

An AD-4 Skyraider airborne early warning aircraft just before touchdown aboard USS *Bon Homme Richard*, July 3, 1951. (U.S. Navy National Museum of Naval Aviation)

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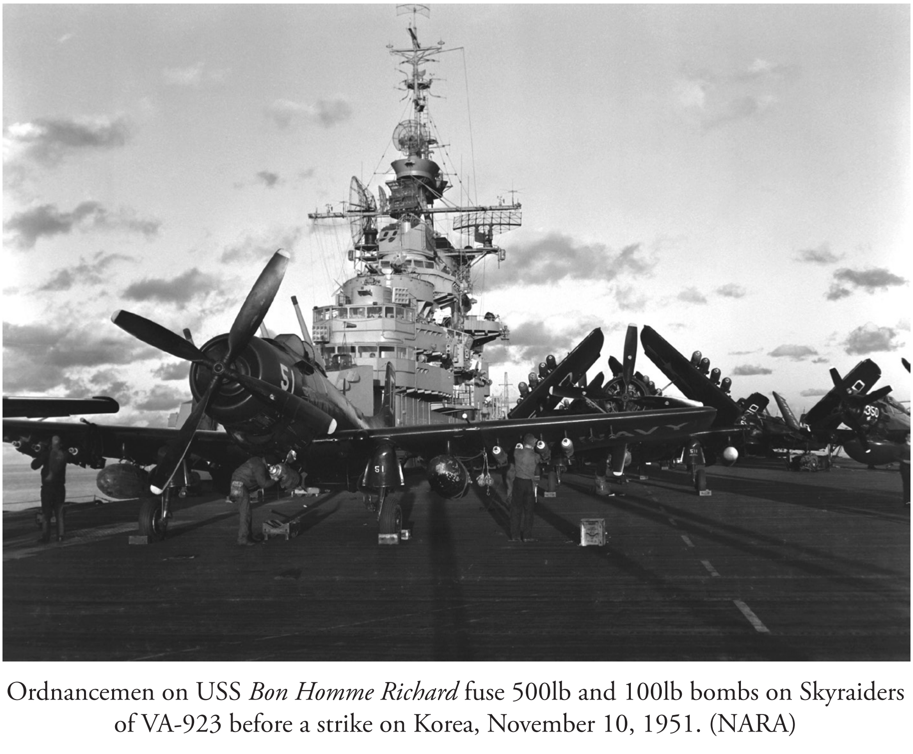
F9F-2 Panthers of VF-721 from USS *Boxer* over North Korea, July 15, 1951. USS *Boxer* operated the first activated Naval Air Reserve air group off Korea in 1951–52. (NARA)

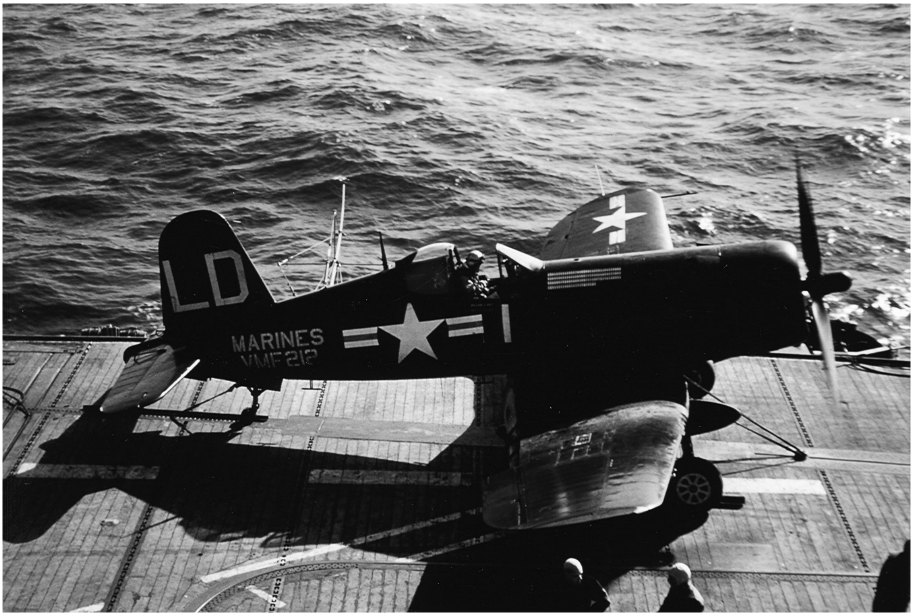
An F9F-2B of VF-721 and a F9F-2P of VC-61 return to USS *Boxer* after a combat mission, August 6, 1951. (U.S. Navy National Naval Aviation Museum)

USS *Essex* on fire off Korea, September 1951. (NARA)

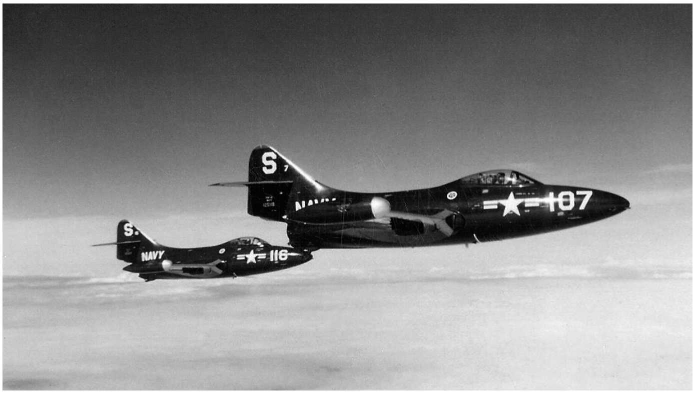
A flight of F4U-4 Corsairs over USS *Boxer*, September 4, 1951. (NARA)



Ordnancemen on USS *Bon Homme Richard* fuse 500lb and 100lb bombs on Skyraiders of VA-923 before a strike on Korea, November 10, 1951. (NARA)



A VMF-212 F4U-4 Corsair ready for catapult launch from USS *Bataan*. Marine Corsair squadrons operated off *Bataan* during her two Korean War tours in 1951 and 1952. *Bataan* was the last light carrier to see combat service. (U.S. Navy National Museum of Naval Aviation)



Two F9F-2 jets from VF-51 during a sortie from USS *Essex* over Korea in 1951–52. Neil Armstrong is piloting the plane in the background. (U.S. Navy National Museum of Naval Aviation)

USS *Buck*, USS *Missouri* and USS *St. Paul* off the coast of Korea, 1952. (NARA)

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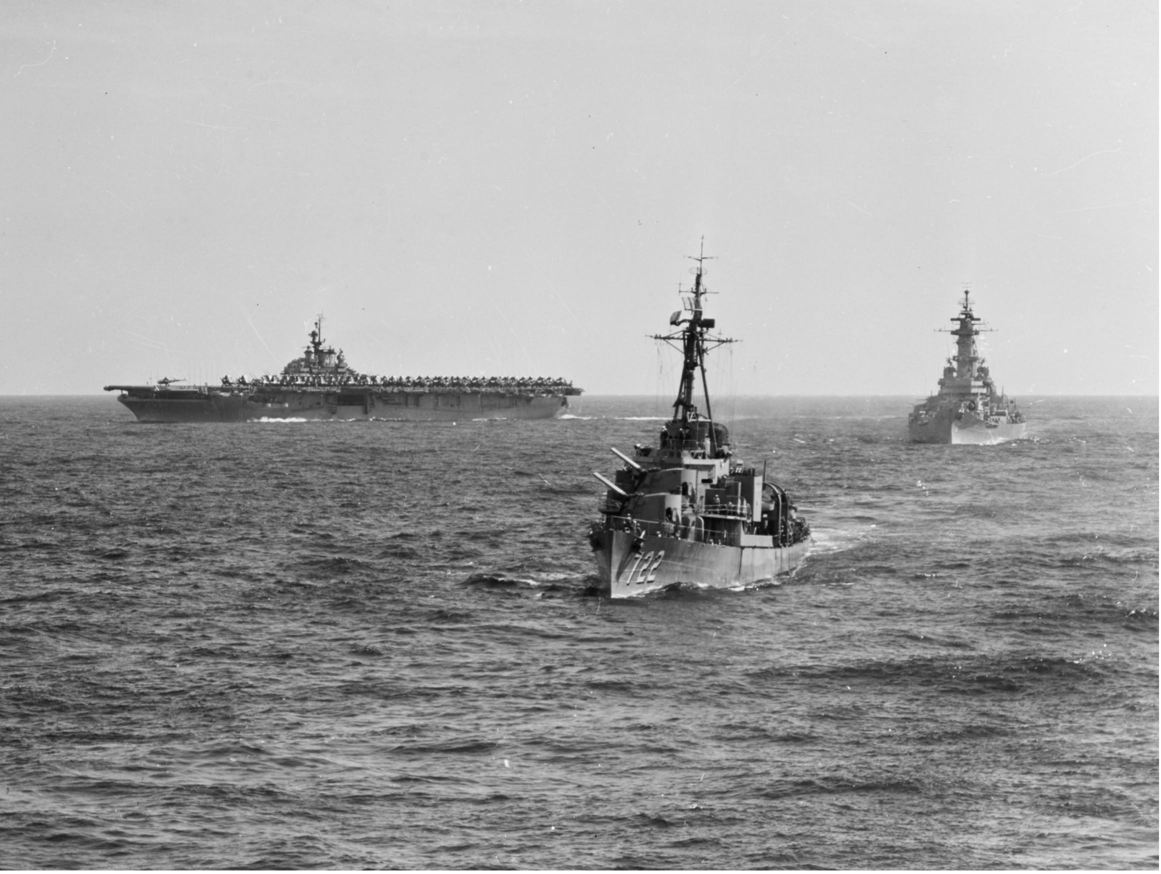
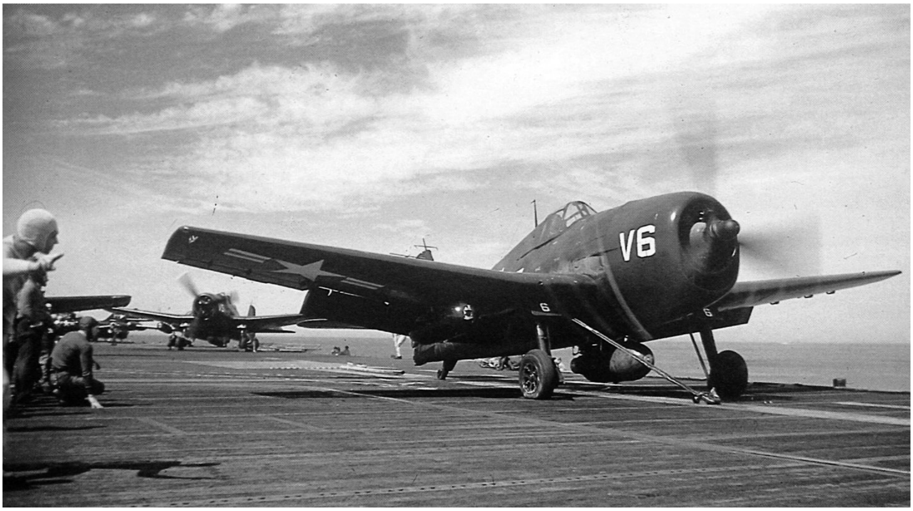
Waiting for a break in the snowy weather aboard USS *Essex*, January 18, 1952. (NARA)

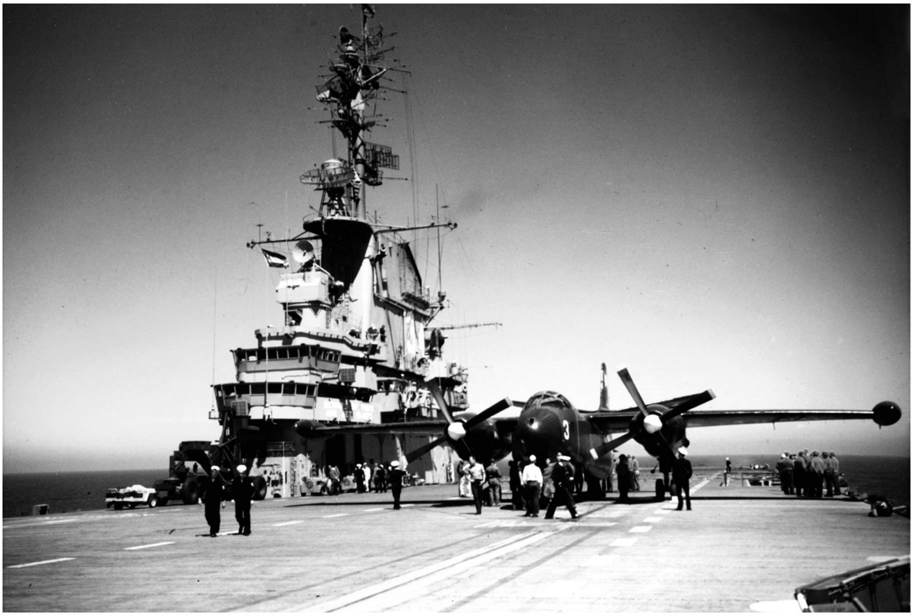
Future first human to stand on the moon, Ensign Neil A. Armstrong in his USNR uniform, May 23, 1952. (NARA)



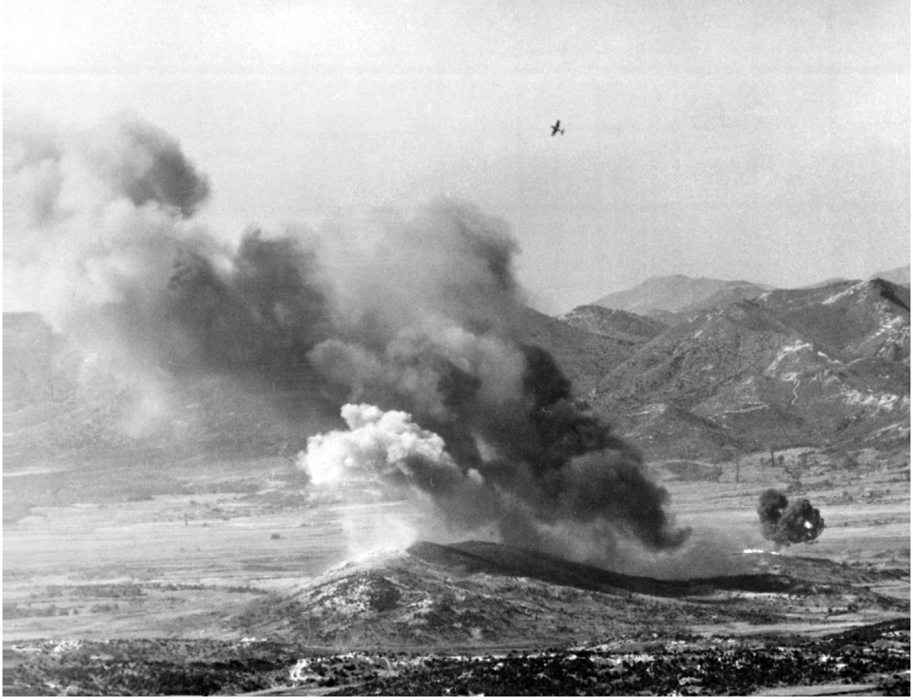
USS *Barton* with USS *Philippine Sea* and USS *Missouri* in the Sea of Japan, July 1, 1952. (NARA)



An F6F-5K drone and its AD-4 Skyraider control aircraft aboard USS *Boxer* (CV-21) in August 1952. The Hellcat drones were unsuccessful when used to strike North Korean targets. (U.S. Navy)

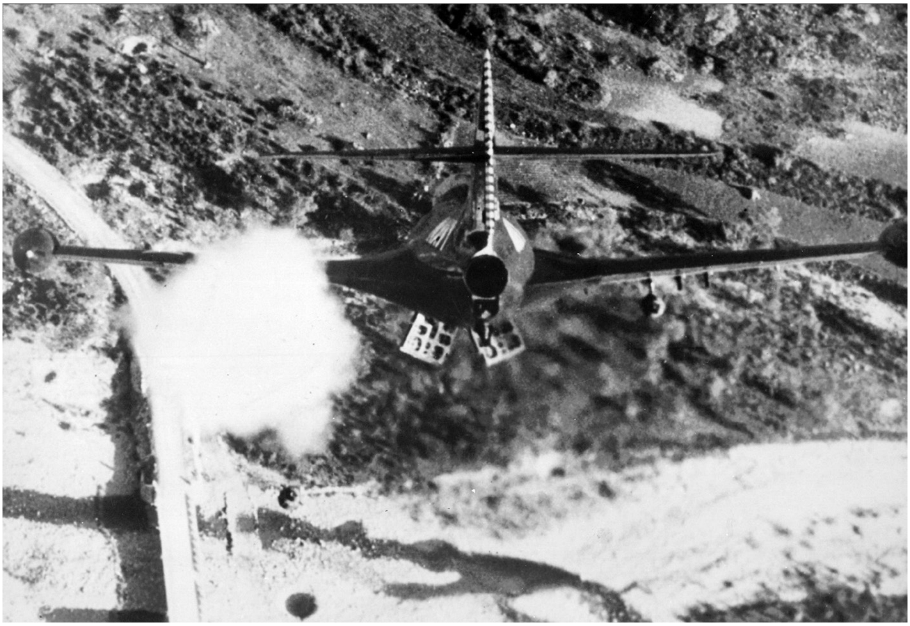


An AJ-1 Savage attack plane aboard USS *Oriskany*, August 29, 1952. (NARA)

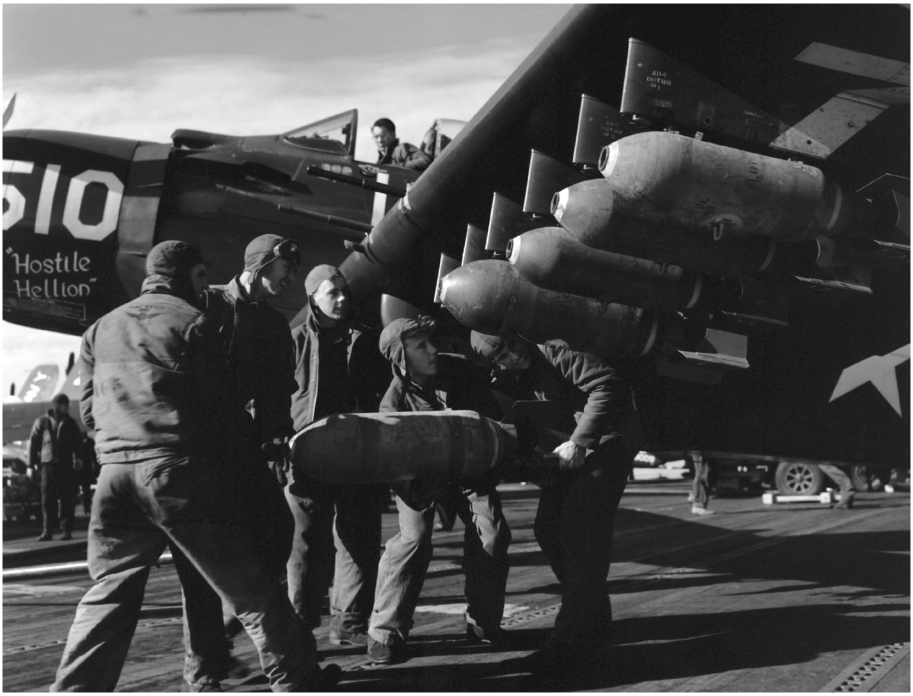


1st Marine Air Wing planes assault positions on a hill on the western front taken by the enemy from Korean Marines, October 1, 1952. An F4U-4 Corsair pulls up from a bombing run. (NARA)

Four Banshees from VF-11 fly over USS *Kearsarge* after a combat mission, October 29, 1952. (U.S. Navy National Museum of Naval Aviation)



A Grumman F9F-2 Panther of VF-71, piloted by Lt R. P. Yeatman bombs a bridge in November 1952. (NARA)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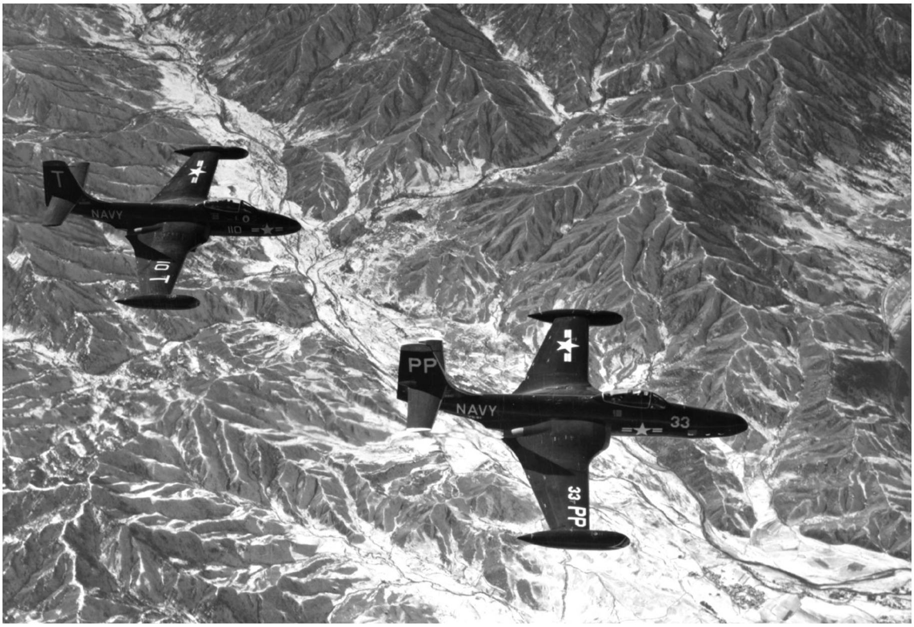
"Hostile Hellion"

Aviation Ordnancemen load 250lb bombs on an AD-4 Skyraider, November 25, 1952. (NARA)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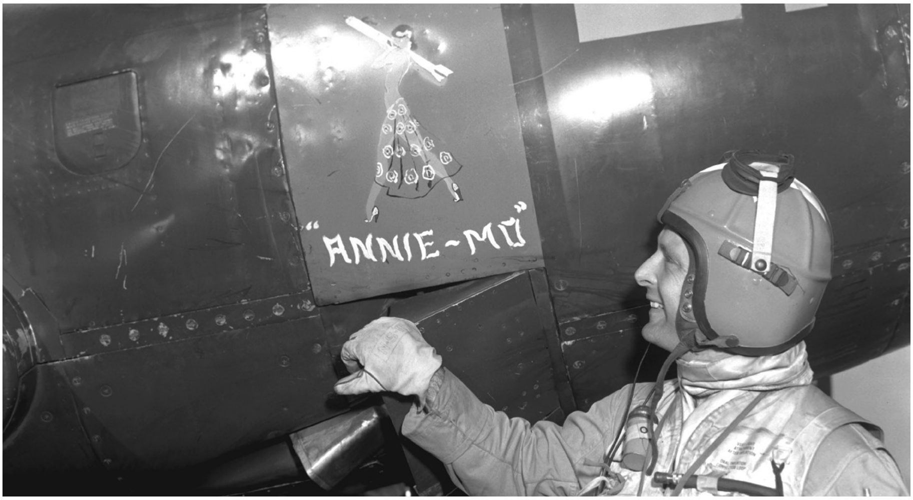
An F2H-2 Banshee escorts a photo-recon F2H-2P Banshee over North Korea, January 5, 1953. (NARA)

NP
NAVY
BEWARE OF PROPS AND JET BLAST

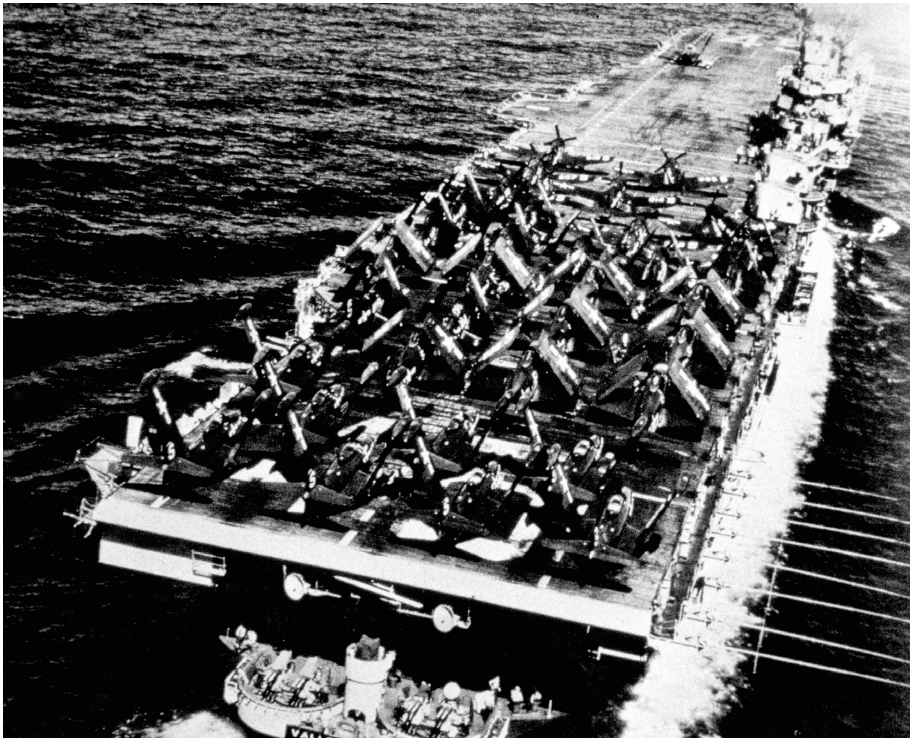
Snow covers the flight deck of USS *Oriskany* off the coast of North Korea, January 10, 1953. (NARA)

USS *Philippine Sea* (CVA-47) May 1953. (NARA)

Skyraiders of VF-194 aboard USS *Boxer*, June 1, 1953. (NARA)



Lt Guy P. Bordelon became the only Navy ace of the Korean War and the last ace to score five victories in a piston-engine fighter when he shot down five North Korean night hecklers over Seoul in June–July 1953. (NARA)



USS *Valley Forge* (CV-47) underway in 1950. The Panthers of VF-51 and VF-52 were the first F9Fs to enter combat in July 1953. (NARA)